



Research Article

## Scale development to measure the attitude of beneficiaries towards National Horticulture Mission

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**SUMMARY :** National Horticulture Mission has been launched as a 100 per cent centrally sponsored scheme to promote holistic growth of the horticulture sector in India in the year 2005-2006 (Tenth Plan). The study was conducted to measure the beneficiaries' attitude towards NHM. The method used to develop the attitude scale was of "Scale Product Method" which combines the Thurston's (1946) Equal Appearing Interval Scale for selection of the items and Likert's summated rating scale for ascertaining the response. Out of 25 statements, 12 statements were retained on the final scale. The reliability and validity of the scale indicated precision and consistency of the results. This attitude scale can be used to measure farmers' attitude beyond the study area with suitable modifications. The present study was conducted in four talukas viz., Anand, Ankav, Borsad and Umreth of Anand district of Gujarat state to assess the attitude of beneficiaries towards NHM, with the sample size of 120 beneficiaries. The study revealed that less than half (46.66 %) of the beneficiaries had neutral attitude towards NHM and correlation proved that land holding and extension contact were positively and significantly correlated with attitude of beneficiaries towards NHM.

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**KEY WORDS :**

Attitude scale,  
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### BACKGROUND AND OBJECTIVES

National Horticulture Mission a holistic programme has been launched by Govt. of India during the year 2005-2006 (Tenth plan) which provided a boost to the horticulture sector, resulting in a significant increase in Horti-business activities, besides bringing in vibrancy in the agricultural economy. NHM was 100 per cent centrally sponsored scheme, of horticulture sector in India with the following main objectives : first to improve horticulture production mainly through area based regionally differentiated strategies and second was to enhance horticulture production, improve nutritional security and income support to farm households. Moreover, enhanced volume of produce will have to be managed judiciously through extensive network of post-harvest and market infrastructure. To strengthen horticulture sector NHM introduced enhanced cost and liberalized pattern of assistance for post harvest management activities during 2010-2011

(Anonymous, 2010)

Success or failure of any programme lies in its pre-disposition of people's involvement and their attitude towards the programme. Comprehensive knowledge of benefits availed from this programme was an important determinant to measure the attitude of the farmers towards NHM. Attitude is predisposition towards NHM acquired with own experiences and it is relatively stable and cannot change easily. To know the extent of success of this programme across the farmers, it is most important to study the attitude of farmers towards NHM. There was no scale available to measure beneficiaries' attitude towards NHM, based on this background, the present study was planned to find the extent of favourable and unfavourable attitudes towards NHM across the beneficiaries.

### RESOURCES AND METHODS

The present study was conducted in Anand

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district of Gujarat state from which, four talukas *viz.*, Anand, Ankla, Borsad and Umreth were selected purposively because, more number of NHM beneficiaries being available in these areas. A proportionate random sample of 120 beneficiaries from 12 villages was selected for the study. The data were collected through pre-tested interview schedule by the investigator from the beneficiaries through personal contact method. To measure the beneficiaries' attitude towards NHM, investigators developed an attitude scale by using Likert (1932) and Edward (1957) methodology. The technique chosen to construct the attitude scale was of "Scale Product Method" which combines the Thurston's (1946), Equal Appearing Interval Scale for selection of the items and Likert's summated rating scale for ascertaining the responses. For further results the data were tabulated and analyzed to draw meaningful conclusion by using descriptive statistics like, mean, standard deviation, frequencies and percentages. Farmers showed favourable or unfavourable attitudes towards various aspects of the NHM because of differences in their personal opinion. Hence, considering the importance of these characteristics and review of past research studies, an attempt has been made in this investigation to ascertain the relationship, between socio-personal, economic, communicational and psychological variables of beneficiaries with their attitude towards NHM by using correlation.

#### **Item collection:**

The items making up an attitude scale are known as statements. A statement may be defined as anything that is said about a psychological object. First step in the development of attitude scale towards NHM was a number of statements about NHM were gathered from the relevant literature, horticulturists, researchers, extension personals and officials of horticulture department who were directly or indirectly exposed to such knowledge system.

#### **Editing of items:**

The statements collected were edited in light of the study.

#### **Judges rating of attitude statements:**

In order to judge the degree of "Unfavorableness" to "Favorableness" of each statement on the five point equal appearing interval continuum a panel of 50 judges was selected. The judges selected for the study comprised of extension educationists, horticulturists and statisticians with considerable practical experience in horticultural crop from the Anand Agricultural University and officials of horticulture department, Anand. The judges visited personally along with letter of instructions to guide them for rating the statements in desired manner for each set of the statements.

#### **Determination of scale and quartile value:**

The five points of the rating scale were assigned, ranging from 1 for most unfavourable and 5 for most favourable. On the base of judgment, the median value of the distribution, and the Q value for the statement concerned was calculated, the inter-quartile range ( $Q = Q_3 - Q_1$ ) for each statement was also worked out for determination of ambiguity involved in the statement.

#### **Final statements for attitude scale:**

When there was a good agreement among the judges, in judging the degree of agreement or disagreement of a statement, Q was smaller compared to the value obtained, when there was relatively little agreement among the judges, it was reverse. Only those statements were selected whose median values were greater than Q values. However, when a few statements had same scale and median value then statement having lowest Q value was selected. Based on the median and Q values, 12 statements were finally selected to constitute attitude scale. The scale values were ranging from 1.1 to 4.1 with 0.5 class intervals.

#### **Reliability of the scale:**

A scale is reliable when it consistently produces the same result when applied to the same sample. In the present study, split-half method of testing reliability was used. The 12 statements were divided into two halves with six odd numbered in one half and other six even numbered statements in the other. These were administered to 25 respondents. Each of the two sets of the statements was treated as a separate scale and then these two sub-scales were correlated. The co-efficient of reliability was calculated by the Rulon's formula (Guilford, 1954), which came to 0.75.

#### **Content validity of the scale:**

Validity of the scale examined for content validity by determining how well content were selected in discussion with specialist, extension academicians, etc. thus, the present scale satisfied the content validity.

#### **Scoring system:**

The selected 12 statements for the final format of the attitude scale were randomly arranged to avoid response biases, which might contribute to low reliability and detract from validity of the scale. The responses can be collected on five point quantum *viz.*, strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 5, 4, 3, 2, and 1 for the favourable statements and with the respective weights of 1, 2, 3, 4, and 5 for the unfavourable statements.

## **OBSERVATIONS AND ANALYSIS**

Attitude refers to the "degree of positive or negative

feeling associated with some psychological object". Present study attitude was conceptualized as positive or negative reactions/feelings of beneficiaries towards National Horticulture Mission. The final statements to measure attitude of beneficiaries towards National Horticulture Mission are given in Table 1.

The data illustrated in Table 2 revealed that less than half (46.66 %) of beneficiaries had neutral attitude towards NHM whereas, 16.66 per cent had strongly unfavorable attitude followed by 14.16 per cent and 16.66 per cent of beneficiaries had favourable and strongly unfavourable attitude towards NHM, respectively. And rest of them (10.83 %) had unfavorable attitude towards NHM. From the foregoing discussion, it can be concluded that majority (60.82 %) of the

beneficiaries had neutral to favourable attitude towards National Horticulture Mission. The result of the study was corroborated with the findings of Patel (2000).

#### Relationship between the profile of beneficiaries and their attitude towards NHM:

The data presented in Table 3 reveal the relationship between socio-personal, economic, communicational and psychological variables with attitude of the farmers with NHM. The independent variables like, land holding and extension contact had positive and significant correlation with attitude of beneficiaries towards various aspects of the NHM. And variables like age, experience in horticulture, sources of information, economic motivation and risk orientation showed

**Table 1: Final statements of the scale to measure the attitude of beneficiaries towards National Horticulture Mission**

Sr. No.	Statements	SA	A	UD	DA	SDA
1.	NHM would generate new employment opportunity in rural area. (+)					
2.	NHM encourages the farmers to take proper care of their orchards and nursery. (+)					
3.	Activities implemented under NHM are not relevant to the needs of small and marginal farmers. (-)					
4.	The procedure of getting the benefits from NHM is complex. (-)					
5.	NHM helps the farmer to improve personal and socio-economic status. (+)					
6.	Increase of fruit production due to NHM will create marketing problem of fruit. (-)					
7.	Due to lack of proper publicity majority of the farmers have not received the benefit given under NHM(+)					
8.	NHM helps to farmers to adopt high value input. (+)					
9.	The small scale industries in fruit processing will be enhance in rural area due to NHM. (+)					
10.	Big farmers only could derive the benefits given under various schemes of NHM. (-)					
11.	There is little work and more of propaganda done by the NHM. (-)					
12.	NHM is a boon for small and marginal farmers. (+)					

SA=Strongly agree, A=Agree, UD=Undecided, DA=Disagree, SD=Strongly disagree

**Table 2: Attitude of beneficiaries towards National Horticulture Mission**

Sr. No.	Attitude	Score	Frequency	Per cent
1.	Strongly favorable	>48.44	14	11.66
2.	Favorable	47.23 to 48.43	17	14.16
3.	Neutral	44.81 to 47.22	56	46.66
4.	Unfavorable	43.7 to 44.80	13	10.83
5.	Strongly unfavorable	<43.60	20	16.66
$\bar{x} = 46.02$		(0.5 S.D = 1.21) S.D = 2.42		

**Table 3 : Relationship between characteristics of beneficiaries and their attitude towards NHM**

Sr. No.	Characteristics of beneficiaries	'r' value
1.	Age	0.1702 NS
2.	Education	-0.0270 NS
3.	Occupation	-0.1378 NS
4.	Land holding	0.1875*
5.	Experience in horticulture	0.0453 NS
6.	Extension contact	0.2088*
7.	Sources of information	0.1664 NS
8.	Economic motivation	0.0117 NS
9.	Risk orientation	0.0552 NS

\* indicates significance of value at P=0.05, NS = non-significant

positive and non-significant relationship with attitude of beneficiaries towards NHM. While variables like, education and occupation had negative and non-significant relationship with attitude of beneficiaries towards NHM.

The probable reason for positive and significant correlation with land holding and extension contact was large farmers had wide scope to spare their land under horticultural crops that make them to interact with the NHM extension officers. This helps them to get solved their obscured points about NHM which led them to form positive disposition towards NHM. And higher extension contact helps to broaden the outlook, facilitates to exchange of thoughts and ideas which may help to remove the obscure point of the beneficiary farmers.

### Conclusion:

It can be concluded from this study that majority (60.82 %) of the beneficiaries had neutral to favourable attitude towards NHM and independent variables like land holding and extension contact had positive and significant correlation with attitude of beneficiaries towards National Horticulture Mission. To increase the awareness, government and extension functionary should work hard at grass root level by organizing training and awareness programmes towards importance of NHM. Government should make provision for processing and marketing of products at national and international level leads to get better income by the farmers. According to data, large farmers were benefited more than small and marginal farmers,

to increase the small and marginal farm beneficiaries' proper intervention of government with the extension functionaries is most important to create the awareness and importance of NHM across them and this will lead to increase the success rate of the programme.

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