

## **A SCALE TO MEASURE ATTITUDE OF MANGO ORCHARDISTS TOWARDS ECO-FRIENDLY MANAGEMENT PRACTICES OF MANGO**

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### **ABSTRACT**

To determine the attitude of mango orchardists towards eco-friendly management practices of mango, an attitude scale was developed by the using Likert technique of summated rating. The scale consisted of 20 statements in which positive and negative statements were arranged on five point continuum. These five points were strongly agree, agree, undecided, disagree and strongly disagree comprising score 5,4,3,2,1 for positive statements and 1,2,3,4,5, for negative statements. The effectiveness of eco-friendly management practices mainly depends upon the practicing mango growers, which in turn is reflected by their attitude towards it.

### **INTRODUCTION**

Eco-friendly management practices are organic in nature. It does not cause any damage to air, water and soil, safe to human beings and are free from causing environmental pollution. These technological practices are dynamic because they differ considerably from region to region depending on soil type, rainfall, topography etc and are often modified by the local farmers.

The technique used by rural people if well documented can make an important contribution to development. Documentary help in search for solution to many problems and also help to reduce the erosion of traditional technology. It can be moulded with scientific knowledge to boost productivity and living standards. These technologies are easily diffused and accepted by the mango growers as those were development by them through continuous experience.

Attitude is a pre-conditional factor for any action. Attitude of an individual plays important role in determining one's behaviour with respect to a particular psychological object. As corollary of this fact the mango grower's attitude towards eco-friendly

technology will largely determine the nature and extent of their involvement and participation in developmental activities. Attitudes of the people towards the programme are of crucial importance in explaining the extent to which they use its services. Also attitude is the degree of positive effects of mango growers towards eco-friendly management practices has immense relevance to their adoption. Studies shown that adoption of eco-friendly management practices depends upon the favourable attitude towards them. There is need to develop standardised scale to know the degree of attitude towards eco-friendly practices. The investigation was undertaken with the specific objective to construct the attitude scale towards eco-friendly management practices of mango.

### **RESEARCH METHODOLOGY**

The detail of the steps followed in the construction of Likert type scale to measure the attitude of mango growers towards eco-friendly management practices have been discussed below :

**Collection of statements :** The first steps in the scale construction was to collect and select a set of statements covering the entire universe of con-

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**Table 1: Attitude of mango growers towards eco-friendly management practices of mango.**

Sl. No.	Statement	't' value	SA	A	UD	DA	SDA
1.	Eco-friendly management practices is the only option to achieve sustainable production of mango.	3.15	5	4	3	2	1
2.	Eco-friendly management practices of mango are nothing new to offer to mango grower.	1.97	1	2	3	4	5
3.	Mango obtained from eco-friendly management practices have high demand in market.	2.86	5	4	3	2	1
4.	Adoption of eco-friendly management practices on large farms requires more human and other resources.	1.96	1	2	3	4	5
5.	Eco-friendly management practices can be adopted by all categories of orchardists.	1.97	5	4	3	2	1
6.	Technology on eco-friendly management practices of mango is beyond the comprehension of ordinary mango grower.	2.74	1	2	3	4	5
7.	Eco-friendly management practices in mango increases its export value.	3.60	5	4	3	2	1
8.	Eco-friendly management practices of mango have less visibility hence orchardists are not easily convinced.	2.30	1	2	3	4	5
9.	The quality of mango produced through eco-friendly management practices is much superior.	4.28	5	4	3	2	1
10.	Eco-friendly management practices of mango can be tried by small orchardists only.	1.78	1	2	3	4	5
11.	Application of eco-friendly management practices in mango should be made compulsory for orchardists for better future.	2.75	5	4	3	2	1
12.	The production and productivity of mango is adversely affected when eco-friendly practices are used.	2.10	1	2	3	4	5
13.	One can make best use of money by spending it in the use of eco-friendly management practices of mango.	3.16	5	4	3	2	1
14.	All mango related problems can be solved by the use of eco-friendly management practices.	2.44	1	2	3	4	5
15.	Adoption of eco-friendly management practices contribute to economic empowerment of orchardists.	3.99	5	4	3	2	1
16.	Eco-friendly management practices of mango does not guard against economic loss.	1.92	1	2	3	4	5
17.	Eco-friendly management practices of mango are suitable for diversification of agriculture.	2.76	5	4	3	2	1
18.	I don't think that eco-friendly management practices are making any impact on mango yield.	1.82	1	2	3	4	5
19.	Mango produced through eco-friendly management practices is good for normal health.	4.22	5	4	3	2	1
20.	Adoption of eco-friendly management practices of mango is more time consuming.	1.79	1	2	3	4	5

SA -Strongly agree, A- Agree, UD -Undecided, DA-Disagree, SDA- Strongly disagree

tent. As such large number of statements covering the entire universe of content were collected from available literature on the subject and by consultation with the experts in the area and with the resources personnel. As such in all 92 statements representing the attitude of mango growers towards eco-friendly technologies were collected.

**Editing the statements :** The statements were then edited according to the criterion laid down by Edwards (1957). Out of 92 statements, 84 statements which satisfied the criteria were selected.

**Selection of items :** The above 84 statements were then administered to a group of 60 respondents. The respondents were asked to indicate their degree of agreement or disagreement with each statement on a five point continuum ranging from 'strongly agree' to 'strongly disagree'. These respondents were different from the actual farmers considered the study. The scores for the positive statement were assigned as Strongly Agree -5, Agree -4, Undecided-3, Disagree-2 and Strongly disagree -1. The scoring for negative statements was reversed. The total score for each of the respondent was then sum of for all items. The subject were then arranged in an array basing on the total score obtained by them. The top 25 per cent of the subjects with highest score (high group) and 25 per cent of the subjects with lower score were used as criterion group. To evaluate individual statement, the critical ratio i.e. t-value which is a measure of the t-unit to which a given statement differentiates between the high and low group of respondents for each statement was calculated by using formula suggested by Edwards (1957).

Thus, 20 statements with high t-value i.e. more than 1.75 were selected for the final scale as they differentiated between high and low groups. Out of twenty, ten statements were positive and ten statements were negative. The 't' values of all the statements are given in table 1.

**Scoring technique :** The items on the attitude scales were provided with 5 point psychological continuum viz. strongly agree, agree, undecided, disagree and strongly disagree with weights of 5, 4, 3, 2 and 1 respectively for the positive statements and 1, 2, 3, 4 and 5 for the negative statements. The attitude score of the respondents could be obtained by sum-

ming up the score for all the items in the scale.

**Validity :** Validity of a scale is the property that ensures that the obtained scales measures the variables they are supposed to measures. The validity of the scale was tested in the following way.

**Content Validity:** The scale was examined for the content validity by determining how well the content of the scale represented the subject matter under study. As all the possible items covering the universe of content were selected by discussions with experts, subject matter specialists and from all the available literature on the subject, the scale satisfied the content validity.

**Reliability :** A scale is reliable only when it gives consistently the same results when applied to the same sample. The reliability of the scale was found out by using Test and Re-Test method. The scale is administered to a fresh group of 30 respondents (excluding sample area). After a period of 15 days the scale was again administered to the same respondents and thus two sets of scores were obtained. The reliability coefficients was 0.74 (Table value 0.463) which is very high. Hence the scale is said to be reliable. In presenting 84 statements were there, now in final scale 20 statements are retained.

**Final scale :** The final format of the scale is presented in Table 1.

## RESULTS AND DISCUSSION

Mango growers have different attitude towards eco-friendly management practices of mango. Every individual may also have own attitude about it. The statements presented in Table-1 reveals the attitude of the mango orchardists towards eco-friendly management practices.

## CONCLUSION

The effectiveness of eco-friendly management practices mainly depends upon the practicing mango growers, which in turn is reflected by their attitude towards it. Hence a scale to measure the attitude of farmers towards eco-friendly management practices has been presented in this paper. The attitude scale constructed in the present study can be used by future researchers in conducting impact and evaluation studies on eco-friendly management practices/ technologies of mango and related crops.

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