

A SCALE TO MEASURE THE ATTITUDE OF RURAL WOMEN TOWARDS KITCHEN GARDEN

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One of the general objectives of the Applied Nutrition Programme in India is "to promote, through demonstration and education among village communities sound and hygienic practices for the production, storage, preservation and use of protective foods to assist in the extension of their practical application at block and village levels and to stimulate self help in this regard". Under the special conditions prevailing in Kerala, where almost every rural house has some land around it, special consideration and assistance is given to the villages to establish a home garden of fruits and vegetables.

Results of research and the experience of extension scientists and workers indicate that the attitude that an individual holds towards an innovation exercises significant influence on his/her accepting or rejecting that innovation. A favourable pre-disposition to an innovation is likely to facilitate a favourable response. Hence the attitude of rural women towards kitchen gardens will determine the nature and extent of popularisation of kitchen gardens in villages. It is therefore important to identify the attitude of rural women towards kitchen gardens so as to take steps to modify the existing attitude or to make necessary changes in the programme of catering the existing attitudes. Though educating the village women on the nutritive value of vegetables towards kitchen gardening is one of the major activities of Applied Nutrition Programme in Kerala, the attitude of women towards kitchen gardening has not been studied in Kerala so far. It will be necessary to investigate this aspect of the Applied Nutrition Programme and hence it was felt necessary that a standardised and objective scale be developed to measure the attitude of rural women towards kitchen garden.

Materials and Methods

Construction of the scale.

A number of attitude scales have been developed by various workers to measure farmer's attitude towards various psychological objects. Though different techniques are available for the construction of attitude scales, Thurstone's Equal-Appearing Interval Scale and Likert's Summated Ratings Scale are the most commonly employed ones. A comparison of these two techniques made by constructing scales from the same universe by Jha and Singh (1973) revealed that the two techniques are fairly comparable and that the Likert technique obviates some of

the difficulties experienced in the case of Thurstone's techniques. Therefore the Likert's Summated Ratings Scale technique was adopted to develop the attitude scale in the present study.

Item collection

The first step in developing the scale was to collect a large number of items (statements) each expressing some opinion about the psychological object under study; namely kitchen garden. The items were collected from relevant literature, informal interview with the workers in the field and experts in the College of Agriculture, Vellayani. 25 rural women who have kitchen gardens in their homes and 25 rural women who did not have kitchen gardens in their homes were also interviewed for this purpose. From all these sources a total number of 50 items was prepared.

Editing

The items collected were edited using the criteria suggested by Edwards (1969). After rigorous selection only 24 items were retained. Care was taken to see that statements were worded to express positive and negative attitudes and to select equal number of positively and negatively worded statements in the scale. These statements were then circulated among the specialists and were requested to point out the positive or negative effect of each statement and also to suggest modifications for the statements if found necessary. In the light of the suggestions made by the specialists the items were modified and rewritten.

Item analysis

The selected items were placed in a random sequence against five rating points, namely, "strongly agree", "agree", "undecided", "disagree", and "strongly disagree". This was then administered on 100 rural women selected at random from the Applied Nutrition Programme Blocks of Trivandrum rural and they were requested to give their reaction to each statement on the above five rating points. If the item was positive, that is, favourable to the psychological object under study, "strongly agree", "agree", "undecided", "disagree" and "strongly disagree" were given scores of 5, 4, 3, 2, & 1 respectively. If the item was negative, that is, unfavourable to the psychological object under study the scoring system was reversed. The total score of a respondent was obtained by summing the weights of the individual item response.

The final selection of items

For the final selection of items the critical ratio of each statement was calculated and for this the frequency distribution of scores based upon the responses to all statements was obtained. 25% of the respondents with the highest total score and also 25% of the respondents with the lowest total score provided the criterion groups to evaluate the individual statements. The critical ratio was calculated by using the following formula suggested by Edwards.

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{\sum (X_H - \bar{X}_H)^2 + \sum (X_L - \bar{X}_L)^2}{n(n-1)}}$$

Reliability of the scale. To test the internal consistency of the scale, split-halves method was employed. The odd numbered items in scale were pooled together for one score and even numbered items were pooled together for another score by dividing the scale into two halves. The two halves were administered on a group of 25 respondents and the agreement between scores on each half of the scale was determined by using Pearsonian correlation coefficient.

Validity of the scale. The content of the attitude scale was formulated from a list of statements obtained from relevant literature and by interviewing specialists, field workers, rural women etc. Further, the t values for all the 24 statements were significant.

Results and Discussion

All the 24 items have t values of more than 1.75 which is recommended as the lowest admissible level by Edwards and the t values are significant indicating that any one of these items differentiated significantly between the high and low groups. Hence these 24 items having t values of more than 1.75 are selected. The items selected finally are given in the Appendix. The correlation coefficient between the two halves and their agreement scores on each half is highly significant (0.55 to 1). This confirms the reliability and the internal consistency of the scale.

As the content of the attitude scale was formulated after consulting a number of sources it can be assumed that the scores obtained in the attitude scale of the study measures what is intended to be measured. Further the 't' values being significant for all the 24 statements included in the scale the attitude statements have high discriminating values.

Summary

The establishment of kitchen gardens is an important component of the activities of the Applied Nutrition Programme. Popularisation of kitchen garden depends to a large extent on the attitude of rural women towards it. Therefore, an attempt was made to construct a scale to measure the attitude of rural women, participating in the Applied Nutrition Programmes in Trivandrum District, towards kitchen gardens. A draft scale was prepared and modified on the basis of the suggestions made by the experts, field workers, house wives etc. Final selection of the statements was made by administering the draft scale on a random sample of 100 women and critical ratio was found out and the reliability and the content validity of the scale were also determined. The final scale is given in Appendix I,

APPENDIX I

The Final Scale

Sl. No.	't' value	Statements	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
1.	9.26	House wives will not get time to do work in the kitchen garden.					
2.	8.03	It will not be profitable to produce vegetables required for the entire family in the home.					
3.	6.55	Every home should have a kitchen garden					
4.	5.46	A kitchen garden in the home necessitates use of the same kind of vegetables every day.					
5.	5.29	Work in the kitchen garden provides exercise to the members of the family.					
6.	5.11	Kitchen garden will solve the problem of vegetable scarcity.					
7.	5.08	There will not be enough space for kitchen garden in the compound of every home.					
8.	5.05	Fresh vegetables can be purchased from the market.					
ft. 5	03	A kitchen garden in the home saves the money spent for purchasing vegetables.					
TO.	4.96	Kitchen garden can be maintained by utilising the wastes in the home.					
11.	4.93	Kitchen garden helps to change the food habits of the family.					
12.	4.87	In a properly planned kitchen garden, besides vegetables, fruits can also be grown.					
13.	4.80	Kitchen garden enables to provide balanced diet to the family.					
14.	4.73	Kitchen garden helps to utilise the leisure time of the family to increase its income.					
15.	4.23	Work in the kitchen garden spoils the health of the family.					

Sl. No	't' value	Statements	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
16.	4.23	Maintenance of kitchen garden eats away the leisure time of family members.					
17.	4.08	Kitchen garden makes fresh vegetable available.					
18.	3.98	Vegetables liked by the family members cannot be produced in the kitchen garden.					
19.	3.97	There will not be ready market for the excess vegetables produced in the kitchen garden.					
20.	3.32	Kitchen garden will be a failure without perennial source of water.					
21.	3.04	An ordinary family cannot afford the fertilisers, pesticides etc. required for the kitchen garden.					
22.	2.59	Kitchen garden meets the daily vegetable requirements of the family.					
23.	2.49	Planting materials for the kitchen garden are not readily available.					
24.	2.49	Kitchen garden can be established in pots also.					

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സംഗ്രഹം

കേരളത്തിലെ പ്രമുഖത പോഷകാഹാര പരിപാടിയിലെ പ്രധാനപ്പെട്ട ഒരു ഇനമാണ് വീടുകളിലെ അടുക്കളത്തോട്ടം. നിർമ്മാണത്തെ പ്രോത്സാഹിപ്പിക്കുകയെന്നുള്ളതു്. അടുക്കളത്തോട്ടനിർമ്മാണം ഏറിയ പങ്കും വീട്ടമ്മമാർക്ക് അടുക്കളത്തോട്ടത്തോടുള്ള അഭിപ്രായത്തെ (attitude) ആശ്രയിച്ചിരിക്കുന്നു. അടുക്കളത്തോട്ടത്തോടുള്ള അഭിപ്രായം നിർണ്ണയിക്കാനുതകുന്ന

ഒരു ആധാരം നിർമ്മിക്കാൻ വേണ്ടിയാണ് ഈ പഠനം നടത്തിയത്. പ്രയുക്ത പോഷകാഹാര പരിപാടിയിൽ പങ്കെടുക്കുന്ന തിരുവനന്തപുരം ജില്ലയിലെ വീട്ടമ്മമാരെ പങ്കെടുപ്പിച്ചുകൊണ്ടാണ് പഠനം നടത്തിയത്. വിവിധതരം നിർദ്ദേശങ്ങൾ ഉൾക്കൊള്ളിച്ചുകൊണ്ട് ഒരു നക്കൽ 'സെ'കയിൽ' ഉണ്ടാക്കുകയും അത് 100 വീട്ടമ്മമാർക്ക് നൽകി അവരുടെ അഭിപ്രായം രേഖപ്പെടുത്തി ശേഖരിക്കുകയും ചെയ്തു. ഈ നിർദ്ദേശങ്ങൾ അപഗ്രഥിച്ച് ഒരു ഖണ്ഡിതമായ സെ'കയിൽ ഉണ്ടാക്കുകയും ചെയ്തു. ഈ സെ'കയിൽ അനുബന്ധമായി ചേർത്തിട്ടുണ്ട്.

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