A Scale to Measure Attitude of Farmers towards Social Forestry Programme

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INTRODUCTION

One of the surest ways of achieving ecological, economic and social security to the people particularly to the rural masses is the social forestry. It envisages to create an overall impact on the social and economic dimensions of rural life.

Social Forestry programme was initiated in Gujarat in 1980 with its four broad components, viz. strip plantations (along roads, railways and canal banks), village woodlots (along community lands), farm forestry (along private lands) and regeneration of degraded forests, supported by world bank and USAID. All the components of social forestry programme ensures the participation of farmers in the programme. Hence, farmers are indispensable components of the social forestry programme on whom much of the sucess of the programme depends.

In social research, attitude of a person or group towards social or psychological object is of prime importance. The success or failure of any social reform or technology would mainly depend upon the people's attitude towards it.

By and large, the success or failure of the social forestry programme depends upon the attitude of farmers, that is what they feel and think about the social forestry programme. Keeping this in view, an attempt has been made to develop a scale to measure the attitude of farmers towards social forestry programme.

METHODOLOGY

Construction of attitude scale :

In the present study, an attempt has been made to develop a scale which can scientifically measure attitude of farmers towards social forestry programme. Among the techniques available for construction of scales, the Thurstone's equal appearing interval technique (1928) and the Likert's summated rating technique (1932) are quite well known. But both the methods suffer from limitations in getting discriminating rating and in selecting items. Thus, the technique chosen to construct the scale was of the scale product method which combines the Thurstone's technique of equal appearing interval scale for selection of items and Likert's technique of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949).

Steps involved in construction of attitude scale :

a) Item collection :

In initial stage of developing the scale, 41 attitudinal statements about social forestry programme were collected from relevant literature, discussion with forest personnel and extension workers. The statements thus selected were edited on the basis of the criteria suggested by Edwards (1957).

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b) Judge's rating of attitudinal statements :

In order to judge the degree of un-favourableness-favourableness of each statement on the seven point equal appearing interval continuum, a panel of 100 judges was selected. The judges selected for the study comprised of professors of the deptt. of extension education of all the agriculture colleges of GAU and other agril. universities of the country and forest personnel of Guj. Forest deptt. The letter of instructions was sent alongwith statements. Out of the hundred judges, fifty judge's replies were considered for the analysis.

c) Determination of scale and Q values :

The seven points of the rating scale were assigned scores ranging from 1 (for most unfavourable) to 7 (for most favourable). Then based on the judgement, the scale and Q values for each Statement were calculated. The following formula was applied to calculate the scale and Q values.

$$S = L + (\frac{0.50 - pb}{pw}) \times i$$

Where,

S = The median or scale value of the statement.

L = The lower limit of the interval in which the median falls.

pb = The sum of the proportions below the interval in which the median falls

pw = The proportion within the interval in which the median falls.

i = The width of the interval and is assumed to be equal to 1.0.

The inter-quartile range (Q=Q3-Q1) for each statement was also worked out for determination of ambiguity involved in the statement.

RESULTS AND DISCUSSION

a) Final statements for attitude scale :

Those items were selected whose median (scale) values were greater than Q values. However, when a few items had the same scale values, items having lowest Q values were selected. Based on the median and Q values, 22 statements were finally selected to constitute attitude scale.

b) Method of scoring :

The selected 22 statements for the final format of the attitude scale were randomly arranged to avoid response bias which might contribute to low reliability and direction from the validity of the scale. Against each of 22 statements, there were five columns representing a five point continuum of agreement and disagreement to the statements as followed by Likert (1932) in his summated rating technique of attitude measurement. The points on the continuum were strongly agree, agree, undecided, disagree and strongly disagree with weight of 5, 4, 3, 2 and 1 respectively for favourable state-ment and with weights 1, 2, 3, 4 and 5 respectively for un-favourable statement.

The weights of Likert's technique and the scale values of Thurstone's technique were combined in form of a product and the total score for an individual was the sum of the product. The final format of the scale is presented in Appendix-I.

c) Reliability of the scale :

The split half technique was used to measure the reliability of the scale. The 22 statements were divided into equal halves with 11 odd numbered in one half and the 11 even numbered statements in the other. These were administered to 20 respondents. Having obtained the two scores for each of the 20 respondents, co-efficient of reliability between the two sets of scores was calculated which was 0.784.

Reliability co-efficient was calculated by rulon's formula (Guilford, 1954).

$$r^{tt} = 1 - \frac{\sigma^2 d}{\sigma^2 t}$$

Where r^{tt} = Coefficient of reliability

d = Difference between two half score of respondents.

$\sigma^2 d$ = Variance of these differences.

$\sigma^2 t$ = Variance of total scores

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APPENDIX - I

Sr. No.	Statement	S.A.	A.	U.D.	D.A.	S.D.A.
1	2	3	4	5	6	7
1.	Social forestry programme has increased the employment opportunities to people in rural areas (6.0)					
2.	The requirement of fuelwood, fodder and times is fulfilled through social forestry programme (3.2)					
3.	Due to restriction acts, people find difficulty to dispose off their produce as per desire (3.4)					
4.	Due to long gestation period of the trees, farmers are not adopting S.F.P. (4.9)					
5.	Training programme on raising/maintaining farm forestry are not organised by training cell of S.F.P. (4.6)					
6.	Labour cost is saved in social forestry (5.8)					
7.	Social forestry programme helps to improve economic condition of the rural people (6.3).					
8.	Social forestry is nothing but the source of livelihood for the Govt. personnel (1.8)					
9.	Due to lack of proper publicity, majority of the farmers have not received the benefits of the farm forestry (4.8)					
10.	People are leaving crop cultivation due to farm forestry (3.3)					
11.	The procedure of getting the seedlings for farm forestry is complex (2.8)					
12.	Sufficient seedlings are not provided to the farmers under social forestry programme (3.1)					
13.	Farm forestry creates conflicts among neighbouring farmers (2.8)					

14.   Seedlings are not supplied to the farmers at their fields for their farm forestry (4.4)

15.   People are awarded about free supply of seedlings, place and time of distribution under S.F.P. (5.4)

16.   Group rivalry has increased in the village due to village wood lot under S.F.P. (2.3)

17.   Due to S.F.P., grazing land of the village is decreased (4.3)

18.   S.F.P. has succeed in rooting out poverty among beneficiaries (5.2)

19.   Timber harvested from village wood lots are first offered and sold to local people (5.1)

20.   S.F.P. develops self-reliance among farmers (5.3)

21.   S.F.P. is livelihood for poor people (6.2)

22.   There is a little of work done and more of its propaganda made in the S.F.P. (3.5)

S.A. = Strongly Agree
A = Agree
U.D. = Undecided
D.A. = Disagree
S.D.A. = Strongly disagree
S.F.P. = Social Forestry Programme