DEVELOPMENT AND STANDARDIZE SCALE TO MEASURE ATTITUDE OF THE FARMERS TOWARDS RECOMMENDED FARM TECHNOLOGIES

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ABSTRACT

The progress and development or failure of any social reforms or development programme mainly depends on peoples' attitude toward it. Thurstone (1946) defined an attitude as the degree of positive or negative effect associated with some psychological object. The attitude in present study means negative or positive reaction of the respondents towards farm technologies. For measuring the attitude of the farmers toward farm technologies, the researcher has developed the scale. Considering the capacity of summated rating technique to measure the broadness, value and intensity of the study area, the researcher has selected the methods suggested by Likert (1932) and Edward (1969) to construct the attitude scale. Thus out of 40 statements 30 statements constituted for the study. The respondents were grouped into three categories on the basis of their attitude towards farm technologies by using Mean ± S.D formula.

Keywords: *scale, atttude, recommended farm technology*

INTRODUCTION

The progress and development or failure of any social reforms or development programme mainly depends on peoples' attitude toward it. Thurstone (1946) defined an attitude as the degree of positive or negative effect associated with some psychological object. In this study, attitude was conceptualized as respondents' degree of favourable or unfavourable disposition towards farm technologies. Acceptance of agricultural technology is not a unit but complex process involving sequence and attitude towards action. The attitude of farmer is influenced by many factors on the part of farmers as well as on the part of technology. In the present study, attitude was conceptualized as farmer's degree of favourable and unfavourable disposition towards farm technologies. Attitude towards farm technologies has been reported as an important factor in adoption process. Many past studies have shown that only availability of technology and help provided by the development agencies are not enough to direct farmers towards adoption process but basic thing require is to have positive attitude of farmers towards technology. It was therefore, assumed that positive attitude of the respondents towards technologies leads towards higher adoption of farm technologies and there by higher techno-economic change.

METHODOLOGY

It refers as the degree of positive or negative effect associated with some psychological object. Attitude is a state of readiness or a tendency to react in a certain manner. Individual's attitude is present but dormant most of the time. Attitude scale has been proved as useful tool to measure the attitude of large number of individuals towards specific areas. Such instrument stimulates people to express their attitude.

The attitude in present study means negative or positive reaction of the respondents towards farm technologies. For measuring the attitude of the farmers toward farm technologies, the researcher has developed the scale. Considering the capacity of summated rating technique to measure the broadness, value and intensity of the study area, the researcher has selected the methods suggested by Likert (1932) and Edward (1969) to construct the attitude scale.

Collection of statements

At initial stage of developing scale, forty attitudinal

statements about different farm technologies were collected from relevant literature and discussed with experts/concern departmental heads and SDAU scientists. The statements so selected were then edited on the basis of the criterea suggested by Edward (1957). All forty statements were found non-ambiguous and non factual and hence, were selected.

Item analysis

The items of the attitude are called statements. All the 40 statements were included into a schedule. The schedule was then mailed to a panel of 120 judges/experts drawn from various agricultural universities including scientists / teachers (not below Assistant professor), extension personnel (Gujarat and other states), Post Graduates students, extension personnel working in the study area etc. They were requested to judge each statement critically with regard to measure attitude towards farm technologies and give their response about inclusion of each statement on five point continuum viz., strongly agree, agree, undecided, disagree and strongly disagree with the score of 5, 4, 3, 2 and 1 respectively.

Among 120 judges, sixty judges responded in time. Frequency distribution of the score of individual judge was then done. The subjects/experts were then arranged in descending order on the basis of total score obtained by them. For item analysis, 25 per cent (i.e., 15 judges) of the subjects with the highest score and the other 25 per cent (15 judges) of the subjects with the lowest score were selected. Each statement contained responses of 30 experts each from higher and lower group. The higher and lower quartiles were used as criterion group to evaluate individual statement. The probability value for each statement was calculated by applying 't' test. Total thirty statements found significant at 0.01 level of probability were selected for the final scale.

Validity of the statements

According to Kerlinger (1976), the content validity is representativeness of sampling adequacy, of the content, the substance, the matter and the topics of measuring instrument.

The validity of a scale is a property that ensures the constructed measures, the variables, which are suppose to measure. Content validity is judgment process called "face validity". A test is said to have validity when, it appears to measure whatever the researcher had in mind and what he thought to be measuring. (Garrett, 1967). The statements included in the scale were based on the expert's opinion which indicated that the scale is valid.

Reliability of the scale

The reliability of the scale was tested by using 'split half method.' The odd number and even number statements were separated for making two halves. The agreement between two halves was determined by calculating correlation co-efficient using Spearman-Brown formula. The calculated value of reliability coefficient for whole test was 0.840, which was highly significant. Therefore, it is concluded that the scale was reliable.

Application of the scale

There were 30 statements in the final scale which were administrated to the farmers and asked to express their reactions on five point continuum viz., strongly agree, agree, undecided, disagree and strongly disagree with the scores of 5, 4, 3, 2 and 1 respectively. The scoring for negative statements was just reversed. The maximum scale value thus, one can obtained was 150 score. The total attitude score for each respondent was obtained by adding the weights of his responses made to individual scale item.

Sr. No.	Statements	SA	A	UD	DA	SDA
1	The livelihood of tribal farmer's has increased due to use of new farm technologies.					
2	Income generating activities has increased due to management of proper farm technologies.					
3	New farm technologies are costly.					
4	New farm technologies are not suitable to tribal farm.					
5	New farm technology has increased agricultural production.					
6	Use of improved agricultural implements has reduce drudgery.					
7	Cultivation of vegetables in Poly house has increased quality of products.					
8	Maintenance of poly house is difficult.					

9	Adoption of micro irrigation technology solve the water scarcity problem.					
10	It is very difficult to adopt micro irrigation technology.					
11	Micro irrigation technology is better than old one.					
12	After introduction of micro irrigation technology there has been a significant improvement in the crop production.					
13	Traditional farm technology are easily adoptable.					
14	Use of pesticide for plant protection is profitable venture.					
15	"WHY TALK OF PESTICIDE" our old ways are better.					
16	I feel that killing of pest is some kind of sin.					
17	High doses of fertilizers recommended for HYV reduce the fertility and structure of soil.					
18	It is profitable to cultivate HYV of crops.					
19	Use of HYV has improved the economic condition of farmers.					
20	All types farmers can adopt the dairy farming.					
21	New technology of dairy farming gives better results than old methods.					
22	Dairy farming is helpful in improving economic condition of farmers.					
23	Dairy farming is nothing but wastage of money, time & labour.					
24	Dairy farming has improved the status of farm women in family & society.					
25	Daily work of dairy farming make it difficult for women to take care of their children.					
26	Dairy farming increase the employment opportunity in rural area.					
27	Graded materials get sold quickly and fetch better price for competition in international market, good quality raw material is required.					
28	Post-harvest technologies are neither profitable to producers nor consumers.					
29	Tree should be in forest not on the farm.					
30	Flood irrigation is good for organic vegetable cultivation.					

SA : Strongly Agree; A : Agree; UD : Undecided; DA : Disagree; SDA : Strongly Disagree

RESULTS AND DISCUSSION

Based on the scale 40 statements 30 statements were finally selected to constitute scale to measure attitude towards farm technologies.

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