

Development of Scale to Measure Attitude of the Farmers towards Agro-Processing

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ABSTRACT

The study was conducted to develop and standardize the reliable and valid scale, to measure attitude of farmer's towards agro processing. 'Scale product method' which combines Thurston and Likert techniques was used, 25 statements were selected for judgment; a panel of 40 judges was requested to assign the score for each statement in five continuums. Based on the scale (median) and Q values, 16 statements were finally selected to constitute the scale to measure attitude of farmer's towards agro processing. Reliability of the scale was found 0.83.

Keywords: Attitude, Agro processing

INTRODUCTION

Agro processing in India derives its strength from its high potential for entrepreneurship development at low capital cost, the high supply elasticity of local resources, the tremendous scope for forward and backward linkages and the potential to meet the growing domestic and export demand for the finished products. The capital-labour ratio is also remarkable low in agro processing industry as compared to non-agro industry. Agro-processed products derive its demand both in domestic markets as well as in international markets. It has been proved that the per capita consumption of processed products has been rising fast in India even in traditional form. The new class of products associated with income and life style of the people are the need of the time. To convince and motivate farmers to accomplish agro processing as an endeavor, positivism towards agro processing in terms of their skill, knowledge and attitude is very much essential. To understand real gap among all these motivational factors like skill, knowledge and attitude systematically well developed scale or tests are needed. Keeping in view the above facts, present study entitled "Development of scale to measure attitude of the farmers towards agro-processing" was undertaken with specific objective 'to develop and standardize a scale to measure attitude of the farmers towards agro-processing'.

METHODOLOGY

In the present study attitude is conceptualized as positive or negative feelings towards agro-processing. Scale product method' which combines the Thrustone's technique of equal appearing interval scale(1928), for selection of items and Likert's technique of summated rating (1932) and for ascertaining the response on the scale as proposed by Eysenck and Crown (1949) was selected to develop the scale.

In initial stage of developing the scale, 37 numbers of statements about reflecting feelings of the farmers towards agro-processing were collected. The collected statements were edited according to the criteria laid down by Edward (1957). From the 37 statements, 25 statements were selected for judgment. In order to judge the degree of "Unfavorableness" to "Favorableness" of each statement on the five point equal appearing interval continuum i.e. strongly agree, agree, undecided, disagree, strongly disagree, a panel of 50 judges was selected.

Determination of scale values

Based on judgment, the median value of the distribution and the Q value for the statement concerned were calculated with the help of

$$S = L + \frac{0.50 - \sum P_b}{P_w} \times i$$

The inter-quartile range (Q = Q3 - Q1) for each statement was also worked out. Only those statements were selected whose median values were greater than Q value. When a few statements had the same scale values, the statements having lowest Q Values were selected (Thurstone, L.

L. 1946). Similarly as Patel and Chauhan (2012) reported the technique to develop and standardize the scale to measure attitude towards application of distance education in agriculture and allied field.

RESULTS AND DISCUSSION

Based on the scale and Q values out of 25 statements 16 statements were finally selected to constitute attitude scale.

Table: -1 Final Statement to Measure Attitude of farmers towards Agro Processing

Sr. No.	Statement	Response				
		SA	A	UD	DA	SDA
1	I think that the handling of agro-processing unit is difficult.					
2	It is worthwhile to spend money on agro-processing.					
3	The adoption of agro-processing is very risky for farming community.					
4	In my opinion, agro- processing is not advisable in rural area.					
5	I think that it is simple to implement agro processing techniques.					
6	I believe only progressive farmer can go for agro-processing.					
7	In my sense, the adoption of agro-processing helps in improving living standard of farmers.					
8	I retard agro-processing, as it is an expensive technology.					
9	In my estimation agro-processing is a profitable business, even though it needs more investment.					
10	I am not confident to start agro processing unit.					
11	In my opinion, establishment of agro-processing unit damages rural ecology.					
12	Agro-processing helps in yielding higher returns.					
13	I think that it is not easy to follow legal procedure for agro-processing unit.					
14	Agro-processing unit is a best source of employment for irrespective level of educated rural youth.					
15	I think that agro-processing optimizes profits over the long term.					
16	I think establishing agro-processing is not within my reach.					

SA = Strongly Agree; A = Agree; UD = Undecided; D = Disagree; SD = Strongly Disagree

Reliability of the scale

The split-half technique was used to measure the reliability of the scale. The 16 statements were divided into two equal halves with 8 odd numbered and 8 even numbered. These were administered to 25 farmers. Each of the two sets

was treated as separate scales having obtained two score, for each of the 25 farmers. Co-efficient of reliability between the two sets of score was calculated by Rulon's formula (Guilford 1954). This was found 0.83. Thus, the developed scale was found highly reliable.

Validity of the scale

The validity of the scale was examined for content validity by determining how well content were selected by discussing it with specialists, of extension and statisticians. Thus, the present scale satisfied the content validity.

Scoring technique

Against each of 16 statements there were five columns, representing a five point continuum of agreement or disagreement to the statements as followed by Likert (1932). The points on continuum were strongly agree, agree and disagree with weight of 5, 4, 3, 2 and 1, respectively for positive statements and reverse scoring for negative statement. To know level of attitude towards agro processing, Score of each statement will be summed up.

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