

## ATTITUDE OF FARMERS TOWARDS AGRICULTURAL PRODUCE MARKET COMMITTEE

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### ABSTRACT

The study was conducted to develop and standardize the reliable and valid scale, to measure attitude of farmers towards Agricultural Produce Market Committee (APMC). The method suggested by Likert (1932) and Edwards (1969) in developing summated rating scale was followed in the construction of this scale. This scale has been standardized and found to be reliable and valid. In order to know the attitude of farmers towards APMC a comprehensive list of 30 statements were prepared. Statements were edited as per the 14 criteria enunciated by Edwards, as a consequence 6 statements were eliminated and the remaining 24 statements were retained for further analysis. These components along with the statements were sent to 50 experts for judge's opinion with (five point continuum). Cent per cent judges were responded in time. Based on the scale (median) and *Q* values, twelve statements were finally selected to constitute attitude of farmers towards APMC. Split half method developed by Brown prophecy was employed to measure the reliability. The reliability co-efficient (0.85) and content validity also worked, indicating higher reliability and validity of the scale.

**Keywords:** attitude; APMC; farmers; scale product method

### INTRODUCTION:

In India, the food production has been increasing and rise in population and food export is too insignificant to have any impact on prices. The real reasons for the runaway rise in food prices is the inefficient Market mechanisms, in which small and medium farmers find it more economic to sell their produce to the local intermediaries, as the market are far away from most villages. To worsen the situation, intermediaries play an important role in exploiting the farmers. Thus, there was a high need to integrate farm production with national and international markets, enabling farmers to undertake market driven production and adoption of modern marketing practices. The APMC system, introduced to prevent distress sale by farmers to their creditors, to protect farmers from the exploitation of intermediaries and traders and to ensure better prices and timely payment for their produce through the auctions in the APMC area.

### OBJECTIVE

To develop and standardize the scale to measure the attitude of farmers towards APMC

### METHODOLOGY

In the present study, attitude is operationalized as positive or negative feeling of farmers towards APMC. Among the techniques available 'Scale product method' which combines the Thurstone's technique (1928) of equal appearing interval scale for selection of items and Likert's technique (1932) of summated rating for ascertaining the response on the scale as proposed by Eysenck and Crown (1949) was used. The procedure followed by Vinaya *et al.* (2016) also used in the study.

### RESULTS AND DISCUSSION

The following procedure was adopted to develop and standardize the scale to measure the attitude of farmers towards APMC.

#### Identification and editing of the statements

The items of attitude scale are called as statements. In initial stage, 30 statements reflecting feelings of the farmers towards APMC were collected from relevant literature and discussion with experts of extension and economics discipline. The collected statements were edited according to the criteria laid down by Edward (1957) and then 24 statements were selected as they were found to be unambiguous.

**Statement Analysis: Computation of scale values and Q values.**

In order to judge the degree of ‘Unfavorableness’ to ‘Favorableness’ of each statement on the five point equal appearing interval continuum, a panel of judges was selected. Fifty slips of the selected statements were handed over to the experts connected with extension educational work. The judges were requested to judge each statement in terms of their most agreement or most disagreement with the statements with the five equal appearing interval continuums. Out of these experts, all the experts returned the statements after duly recording their judgments and were considered for the analysis.

**Determination of scale values**

Based on judgment, the median value of the distribution and the S value for the statement concerned were calculated with the help of 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 and Chave (Edwards, 1957) described another criteria in addition to Q as a basis for rejecting statement in scales constructed by the method of the equal appearing interval. Accordingly when a few items had the same scale values, the item having lowest Q Values were selected. The final selected statement showing attitudes are given in Table 1. Formula to find out Median or S value

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

Where,

S = Median or Scale value of statement

L = Lower limit of the interval in which the median falls

$\sum P_b$  = Sum of the proportion below the interval in which the

median falls

$P_w$  = Proportion within the interval in which the median falls

i = idth of the interval which was assumed as equal to 1.0 (One).

Formula to find out value of C25 or (Q1)

$$C25 = L + \frac{0.25 - \sum P_b}{P_w} \times i$$

Where,

C25 = 25th centile value of the statement

L = Lower limit of the interval in which the 25th centile falls

$\sum P_b$  = Sum of the proportion below the interval in which the 25th centile falls

$P_w$  = Proportion within the interval in which the 25th centile falls

i = Width of the interval and is assumed to be equal to 1.0 (one)

Formula to find out value of C75 or (Q3)

$$C75 = L + \frac{0.75 - \sum P_b}{P_w} \times i$$

Where,

C75 = 75th centile value of the statement

L = Lower limit of the interval in which the 75th centile falls

$\sum P_b$  = Sum of the proportion below the interval in which the 75<sup>th</sup> centile falls

$P_w$  = Proportion within the interval in which the 75th centile falls

i = Width of the interval and is assumed to be equal to 1.0 (one)

**Table 1: Final selected statements to measure attitude of the farmers towards APMC**

Sr. No.	Statements	Scale Value	Q value
1	I endorse that APMC is farmers’ friendly approach to sale farm products. (+)	1.6	1.07
2	APMC is the best system to secure farmers exploited by intermediaries. (+)	1.8	1.22
3	APMC is inadequate system to help farmers to sale farm products appropriately. (-)	2.6	1.04
4	APMC serves as a system to stop harsh conditions created by traders for farmers. (+)	2.3	1.42
5	Payment system of farm produces adopted under APMC is inappropriate. (-)	2.8	2.11
6	APMC is not a long-term solution to the problems of price inflation. (-)	2.9	1.87
7	APMC ensures effective mode of payment for agricultural produce sold by farmers. (+)	1.9	0.94
8	APMC prevents distress sale of farm produces. (+)	2.1	1.25

9	APMC does not help farmers in getting higher returns of produces when consumer prices are high. (-)	3.1	2.18
10	APMC checks monopoly of agro-traders. (-)	2.2	1.75
11	APMC does not give chance to the farmers to access larger markets to get benefits. (+)	3.6	1.48
12	APMC protects price-crash. (+)	2.4	1.70

**Standardization of the scale**

A scale is reliable when it gives consistently the same results when applied to the same sample. The designed scale for the study was pre-tested for its reliability by using the split half method. Pilot study was conducted among 20 respondents in non-sample area comprising 12 statements.

**(i) Reliability of the scale**

To know the consistency of the scale, reliability was worked out. The split-half technique was used to measure the reliability of the scale. Selected 12 attitudinal statements were divided into two halves with 6 (Six) odd and 6 (Six) even numbered statements. Each of the two sets was treated as separate scales having obtained two score, for each of the 20 respondents. Co-efficient of reliability between the two sets of score was calculated by Rulon’s formula (Guilford 1954), which was 0.85.

**Rulon’s Formula :**

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

Where;

$$\sigma^2 d = \frac{\sum d^2 - \frac{(\sum d)^2}{n}}$$

$$\sigma^2 t = \frac{\sum t^2 - \frac{(\sum t)^2}{n}}$$

- rtt = Coefficient of reliability
- $\sigma^2 d$  = Variances of these differences
- $\sigma^2 t$  = Variance of total score

The correction factor is calculated by using Spearman Brown formula.

$$rtt = \frac{2roe}{1 + roe}$$

- Where,
- rtt = Coefficient of the reliability of original test
- roe = reliability of coefficient of odd and even score

**(ii) Validity of the scale**

The validity of content of scale was examined by discussing with specialists of the extension and statistics. Specialists examined and realized appropriateness of the each statement to measure the feeling of farmers towards APMC.

**Administering the scale**

The final scale consists of 12 statements to measure the attitude of farmers towards APMC. the researcher can collect information against each 12 statements in five point continuum viz. 'Strongly agree', 'Agree', 'Undecided', 'Disagree' and 'Strongly disagree' with weighted score of 5,4,3,2 and 1 for positive and reverse to negative statements.

**CONCLUSION**

From the various methods available for constructing the attitude scale, 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 was used to measure the attitude of farmers towards APMC.

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