

## A SCALE TO MEASURE THE ATTITUDE OF FARMERS TOWARDS PM-KISAN SCHEME

Misari Joshi<sup>1</sup> and J. B. Patel<sup>2</sup>

1 M. Sc. Dept. of Agricultural Extension and Communication, BACA, AAU, Anand – 388110 India

2 Professor & Head, Department of Agril. Extension & Communication, BACA, AAU, Anand – 388110 India  
Email : jb@aau.in

### ABSTRACT

The government has established a number of initiatives in the agriculture sector to help farmers by increase their production and improve their financial status. PM- KISAN scheme is a new central sector scheme launched under the Ministry of Agriculture and Farmers Welfare in December 2018. In Gujarat, there are 62,91,527 farmers were benefited from 2020-21. Hence to understand the feelings of farmers towards PM-KISAN scheme, a scale was developed to measure the attitude of farmer towards PM-KISAN scheme. Appropriate statistical method, 'scale product method' which combines Thurston and Likert technique was used. Twenty-one (21) statements were selected for judgement; a panel of 50 judges was requested to assign the score for each statement in five continuums, based on the scale (median) and Q values, thirteen (13) statements were finally selected to constitute scale to measure attitude towards PM-KISAN scheme.

**Keywords:** attitude, PM-KISAN scheme, scale development, farmers

### INTRODUCTION

Agriculture and allied activities are of the most important sectors of Indian. Its contribution to the country's GDP is also significant. About 70 per cent of the rural households in India depend primarily on Agriculture for their livelihood and 86 per cent of the Indian farmers are small and marginal part. The government has taken many measures from independence till date to strengthen the agriculture sector and to sustain the income of the farmers. Government of India introduced Pradhan Mantri Kisan Samman Nidhi, or (PM-KISAN) in December 2018 and implemented from February 2019. PM-KISAN scheme directly payment of ₹ 6000 per year which transferred in three equal instalments of ₹ 2000 every four months into the Aadhar seeded bank accounts of eligible small and marginal farmers. The PM-KISAN scheme aims to supplement the financial needs of the Small and Marginal Farmers (SMFs) in procuring various inputs to ensure proper crop health and appropriate yields, commensurate with the anticipated farm income at the end of each crop cycle. In Gujarat, there are 62,91,527 farmers were benefited from 2020-21. PM-KISAN scheme reached to the large scale of farmers thus, it is highly important to find out the present status of farmers' attitude and factors responsible for forming the attitude towards PM-KISAN scheme. An attempt was carried out construct a scale to measure the attitude of the farmers towards PM-KISAN scheme.

### OBJECTIVE

To develop the scale to measure the attitude of the farmers towards PM-KISAN scheme

### METHODOLOGY

Attitude refers to the "degree of positive or negative affect associated with some psychological object" (Thurstone,1946). In the present study attitude is conceptualized as positive or negative reaction of farmers towards PM-KISAN scheme. Among the techniques available, researcher has used 'Scale product method' which combines the Thurstone's technique of equal appearing interval scale (1929) for selection of items and Likert's technique of summated rating (1932) for ascertaining the response on the scale.

### Item collection

The items making up an attitude scale are known as statements. A statement may be defined as anything that is said about a psychological object. As a first step in developing the scale, 61 statements were collected from the relevant literature, and consulting experts and extension personnel of Anand Agricultural University. The statements, thus selected were edited on the basis of the criteria suggested by Edward (1957), and finally, 21 statements were selected as they were found to be non-ambiguous.

### Judge's rating of attitude statements

Fifty slips of the statements were sent to 50 experts working in Extension Education Institute (EEI), KVK's, ATMA, Training Centers, ATIC, Sardar Smruthi Kendra (SSK), Department of Extension Education and Directorate of Extension Education of agricultural universities of Gujarat

state and also to several other State Agricultural Universities (SAU's) across India through direct contact/e-mail, in order to judge the degree of unfavourableness to favourableness of each statement for its inclusion in the final scale on the five points equal appearing interval continuum. All the 50 experts returned the statements after duly recording their judgments and were considered for the analysis.

**Determination of scale and quartile values**

The inter-quartile range ( $Q = Q^3 - Q^1$ ) 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 (1946) described another criterion 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. With this same manner, a scale to measure the attitude of the PM-KISAN scheme was developed.

**RESULTS AND DISCUSSION**

Based on the scale and Q values out of 21 statements 13 statements were finally selected to constitute a scale to measure the attitude of the PM-KISAN scheme.

Table 1: Final Selected statements to measure the attitude of farmers towards PM-KISAN scheme

| Sr. No. | Statement  | S value | Q value |
|---------|--|---------|---------|
| 1       | I believe that PM-Kisan scheme helps farmers to purchase agro-inputs timely.                   | 1.81    | 0.96    |
| 2       | The PM-Kisan scheme is a valuable scheme to reduce farmers' dependency on money lenders.       | 1.71    | 1.01    |
| 3       | The PM-Kisan is a potential scheme to encourage farmers to adopt innovative farming.           | 1.94    | 0.94    |
| 4       | The PM-Kisan scheme does not offer the required amount to handle crop failure.                 | 2.40    | 2.21    |
| 5       | The PM-Kisan scheme truly offers farmers a reserved source of credit.                          | 3.58    | 2.20    |
| 6       | The PM-Kisan scheme develops a tendency of dependence in the long run among the farmers.       | 2.37    | 1.76    |
| 7       | The PM-Kisan scheme develop a habit of irrelevant usage of money among the farmers             | 2.05    | 0.94    |
| 8       | The PM-Kisan scheme encourages farmers to maintain proper land records.                        | 2.22    | 1.08    |
| 9       | The PM-Kisan scheme is unsustainable scheme to support the farmers.                            | 3.31    | 2.08    |
| 10      | The PM-Kisan scheme is wastage of government money.  | 3.65    | 2.75    |
| 11      | The PM-Kisan scheme has a potential to handle uncertain situations in the life of the farmers. | 1.46    | 1.04    |
| 12      | The PM-Kisan scheme is more political propaganda than reality.                                 | 2.50    | 2.35    |
| 13      | The PM-Kisan scheme is an unproductive scheme to solve farmers' financial problems.            | 2.92    | 1.63    |

A scale is reliable if it consistently produces the same results when applied to the same sample. In the present study, split-half method of testing reliability was used. The 13 statements were divided into two halves with 7 odd-numbered in one half and 6 even-numbered statements in the other. These were administered to 20 farmers. Each of the two sets of statements was treated as a separate scale and then these two sub-scales were correlated. The co-efficient of reliability was calculated by the Rulon's formula (Guilford, 1954), which came to be 0.79. Thus, the scale developed was found highly reliable.

**Content validity of scale**

The validity of the scale was examined for content validity by determining how well the content of the scale

is representative of the domain subject matter under study (Thorat et al., 2015 and Vinaya et al., 2017). Since as many items covering the subject matter under study as possible were selected by discussion with the experts, reviewing the literature and strict adherence to the judges' ratings, it was assumed that the scale has satisfactory content validity.

**Scoring technique**

Against each of 13 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 agreed, 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 the farmers towards PM-KISAN scheme.

Score of each statement will be summed up.

**REFERENCES**

Edward A. L. (1957) Techniques of attitude scale construction, Appleton Century Crofts, Inc., New York

Goswami, B. (2016). Factors affecting attitude of fish farmers towards scientific fish culture in West Bengal! *Indian Research Journal of Extension Education*, 12(1), 44-50.

Guilford, J. P. (1954). Psychometric Methods. Tata Mc Graw-Hill Publication Co. Ltd., Bombay, pp. 378-382.

Meena, H. R. Fulzele, R. M. (2008). Measuring scale of economic motivation. *Indian Res. J. Ext. Edu*, 8 (2&3), 22-25.

Thurstone, L. L. (1946). The Measurement of attitude. American Journal of Sociology, Chicago University Press, 39-50.

---

*Received : September 2021 : Accepted : December 2021*