

## A TOOL TO MEASURE ATTITUDE OF FARMERS TOWARDS PRADHAN MANTRI FASAL BIMA YOJANA

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### ABSTRACT

*The study was conducted to develop and standardize a reliable and valid scale to measure attitude of the farmers towards Pradhan Mantri Fasal Bima Yojana. From the available methods to develop attitude scale, 'Scale product method' was used. This method combines Thurston and Likert techniques. Total 52 statements were selected for judgment; a team of 100 judges was appealed to give the score for each statement on five point continuum. Based on the Scale (median) and Q values, twenty four statements were finally selected to constitute the scale to measure attitude of the farmers towards Pradhan Mantri Fasal Bima Yojana.*

**Keywords:** PMFBY, farmers, attitude

### INTRODUCTION

Agriculture is an important sector of Indian economy. The share of agriculture and allied sector in total Gross Domestic Product (GDP) is 16.00 per cent in Indian economy. In India 54.60 per cent of population is engaged in agriculture and allied activities (Census 2011). Agriculture plays vital role in development of country. But Indian agriculture is characterized by risk bearing and uncertainty because of many factors like, lack of technology, lack of knowledge of risk mitigation, irrigation, weather condition, usage of seeds, fertilizers pesticide, uncertainty in monsoon, lack of input supply facilities, non-availability proper market facility, pest and diseases, the higher expenditure as compared to production, uncertain income in each year. Due to dependence on weather and biological uncertainties in managing crops, the agriculture production fluctuates in India and thus has direct impact on both the national income and the farmers or the cultivators (Shanker, 2018).

Agricultural insurance is considered as an important mechanism to address the risk of output and income resulting from various natural and manmade events. The risk-bearing capacity of marginal and small farmers in the country is very limited. To avoid the risk and uncertainty in agriculture at the national and state level, various agricultural development schemes are implemented by the government to bring the development in agriculture and facilities provided to the farmers.

Agricultural insurance is a means of protecting the

agriculturist against financial losses due to uncertainties that may arise from all unforeseen perils beyond their control. Unfortunately, agricultural insurance in the country has not made much headway even though the needs to protect farmers from agriculture variability have been a continuing concern of agriculture policy. Crop insurance is one method by which farmers can stabilize farm income and investment and guard against the disastrous effect of losses due to natural hazards or low market prices.

### OBJECTIVE

To develop a tool to measure attitude of farmers towards pradhan mantri fasal bima yojana

### METHODOLOGY

In the current study, attitude is defined as positive or negative feeling of farmers toward Pradhan Mantri Fasal Bima Yojana. Among the procedures accessible 'The Scale product method' which is a combinations of the Thrustone'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 was used.

### Item collection

The items of attitude scale called as statements. In initial stage of developing the scale large number of statements about Pradhan Mantri Fasal Bima Yojana were collected from relevant literature, discussion with experts of dairy, staff of Agricultural Extension and Communication

discipline, S.D.A.U., Sardarkrushinagar and Extension functionaries of the area. The statements, thus selected were edited according to the criteria laid down by Edward (1957). In all 52 statements were selected as they were found to be non-ambiguous and nonfactual.

### Item analysis

Probably, all the collected statements may not be appropriate equally in measuring the attitude for present study therefore, these were subjected to scrutiny for its appropriateness by the judges. The five points equal appearing interval continuum was used to judge each statement on the degree of unfavourableness to favourableness. The personnel working as extension educationist, sociologist and psychologist were identified from various universities of India and prepared schedule which contents 52 items was sent for judging the relevancy. The schedule was sent via post and on line through 'Google forms' to 250 judges with

request to analyze the relevancy of items. Out of the total, 100 judges had responded.

### Determination of scale and 'Q' values

Based on responses of the judges, Frequency distribution in five continuums was prepared. On the bases of judgment, the Median value of the distribution and 'Q', Q3 and Q1 values for each of 52 statements were worked out. The inter-quartile range ( $Q=Q3-Q1$ ) for each statement was exercised for determination of vagueness involved in the statement. Only those statements as items were selected, whose median (scale) values were greater than Q values. On the other hand, when a few items had the same scale values, items having lowest Q value were selected. Based on this, 24 statements were finally selected to constitute attitude scale. The selected 24 statements for final format of the attitude scale were randomly arranged to avoid response bias. The final format of the scale is presented in Table: 1.

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

Sr. No	Statements	'S' value	'Q' Value
1	Crop insurance is based on the individual decision of farmer (+)	4.222	1.347
2	I believe that PMFBY helps me to protect against financial risk (+)	4.451	1.138
3	I believe that PMFBY encouraged to adopt innovative agricultural practices (+)	3.672	2.438
4	I feel that PMFBY is better than earlier schemes (+)	3.733	1.759
5	I am unaware of any yield assessment of crop cultivating experiment (-)	3.600	2.822
6	I would be able to cope up with risks better by using crop insurance scheme (+)	3.000	2.504
7	I take pride in saying that I am benefiting from PMFBY (+)	3.671	1.599
8	In my opinion getting PMFBY is wastage of money (-)	3.026	2.336
9	PMFBY insurance scheme needs to refine to avoid complexicity (-)	4.174	1.213
10	PMFBY helps me at the time of repayment of crop losses (+)	3.833	1.832
11	Crop insurance helps me to go for crop diversification (+)	3.689	2.198
12	I feel PMBFY is not transparent (-)	3.458	2.156
13	I believe that PMFBY scheme has become a real boon to farmers (+)	2.625	2.149
14	I believe that PMFBY scheme is more welfare oriented (+)	3.912	1.811
15	I feel that political interventions are more in PMFBY (-)	4.244	1.196
16	I feel that crop insuring agency are not compensating fairly in case of crop losses (-)	4.115	1.363
17	I feel Insurance claims are handled within the expected time under PMFBY (+)	4.000	1.228
18	I would like to continue crop insurance scheme as it saves me from risk (+)	2.324	1.967
19	Receiving claim under PMFBY is pathetic in our region (-)	2.855	1.833
20	The criteria for getting compensation in the PMFBY are correct (+)	3.55	2.06
21	The government is giving priority to compensation under PMFBY (+)	3.15	2.329
22	Crop insurance assumed income stability of the farmer (+)	3.25	2.255
23	The officials doing the right thing in PMFBY (+)	3.553	1.342
24	PMFBY helps farmers in interacting with different institutions (+)	3.667	2.822

### Validity of the scale

The content validity of the scale was tested. It is the representative or sampling adequacy of the content, the

substance, the matter and the topics of a measuring instrument. This method was used in the present scale to determine the content validity of the scale. As the content of the attitude was thoroughly covered the subject matter under the study

through literature and expert opinion, it was assumed that present scale satisfied the content validity.

### Reliability of the scale

A scale is reliable when it gives consistently same results when it applied to the same sample. The designed attitude scale for the study was tested for its reliability by using the split half method. It was introduced to 30 respondents of non-sample area. The coefficient of reliability between these two sets of score was calculated by Rulon's formula, which came to 0.91. Thus the scale developed was highly reliable.

### Administering the scale

The selected 24 statements for the final format of the attitude scale were randomly arranged to avoid the response biases, which might contribute to low reliability and detraction from validity of the scale. Out of the 24 selected statements, 17 statements were the indicators of the favorable attitude and 7 statements were the indicators of unfavorable attitude.

Against these 24 statements, there were five columns representing five points continuum of agreement and disagreement to the statements as stated by Likert (1932) in his summated rating technique to measure the attitude. The five points continuums were strongly agree, agree, undecided, disagree and strongly disagree with respective weights of 5, 4, 3, 2, and 1 for the favourable statements and with the respective weights of 1, 2, 3, 4 and 5 for the unfavorable statements.

### CONCLUSION

There are various methods available to construct attitude scale. From the various methods available for constructing the attitude scale, scale product method' was used in the study. This method is a combination of the Thrustone'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 was used to measure the attitude of farmers towards Pradhan Mantri Fasal Bima Yojana. The tool developed here will certainly be helpful to appreciate and develop positive feelings of the farmers towards Pradhan Mantri Fasal Bima Yojana.

### CONFLICT OF INTEREST

The authors declare no conflicts of interest related to the research presented in this article.

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