



Attitude of the Staff Towards Farmer Producers Organization – Development and Standardization of the Scale

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ARTICLE INFO

Keywords: Attitude, Staff, Farmer producers Organization, Summated rating scale, Reliability, Validity

<https://doi.org/10.48165/IJEE.2024.601RT2>

Conflict of Interest: None

Research ethics statement(s):

Informed consent of the participants

ABSTRACT

Farmer Producers Organization is an organization where the members are farmers who come together to buy inputs collectively, sell their produce in bulk eliminating the middlemen and processing the produce to gain more returns. As staff are important assets of the organization, it is advisable to measure their attitude towards the organization. An attempt was made for the construction of scale to measure the attitude of staff towards the Farmer Producers Organization using summated rating scale. After analyzing the review of literature, 48 statements were enlisted initially and were sent to 100 judges. Based on the response of 34 judges, 25 statements were finalized for item analysis. After calculating t-values, 14 statements were finalized in which 10 were positive statements and 4 were negative statements. The reliability was checked using split half method and validity was examined with the help of content validity. The reliability coefficient was found to be 0.84 which indicates that the scale is reliable.

INTRODUCTION

Farmer Producers Organization are developed to assist farmers in maximizing their returns through group input purchases, boosting productivity by obtaining better inputs, marketing, processing, expanding farmers' knowledge about better technologies and management techniques to ensure good quality for higher returns. Today's farmers, especially marginal and small producers, face a variety of obstacles like small land holdings, lack of bargaining power, lack of credit access and exploitation by middle men leading to reduced benefits from economies of scale (Parthiban et al., 2015; Kumari et al., 2022; Roy et al., 2022). They by joining as members in the FPO can get access to inputs, machinery, services, and appropriate technologies while overcoming the limitations and sell their produce collectively to strength their bargaining power to increase their profits, access high-value markets, and form partnerships with private companies on fairer terms. By forming groups, they can also plan collectively for procurement

of inputs, placing credibility on the localized resources (Nain et al., 2015) production of high value crops (Venkatesan et al., 2020), processing of produce and marketing of value added products to improve their returns.

Indian government has introduced the concept of producer organizations by the Companies Act 1956 (Singh et al., 2022) and are mainly promoted by NABARD and SFAC (Kumar et al., 2023). FPOs are essential for the growth and development of marginal and small farmers (Rathour et al., 2022) as well as the rural poor and supports farmers economically by assisting them to develop their skills and acquire knowledge they need to grow their crops, value addition, market their products, and create strong connections with both input agencies like financial service providers, outside market places, utilize digital platforms and gain more profits (Raina et al., 2011; Kumar et al., 2021 & Priyanka et al., 2023). They mainly focus on buying the inputs, equipments, fulfilling quality requirements, managing drying, cleaning, grading, processing, packing, branding, storage, and transportation of the

produce on collective basis to reduce the costs and improve the revenues of farmers by eliminating middlemen. Organized farmers have more negotiating power than unorganized farmers and are better equipped to deal with powerful actors in the market. One of the most efficient approach to address the numerous issues faced in agriculture is the collective organization of farmer producers, particularly small and marginal farmers. The most significant contribution of FPOs to the farmers is providing better access to markets, technology, inputs, investments, through mobilizing and empowering farmers to increase their capacity for production and sale. As more than 58.00 per cent of Indians depend on agriculture, it is still the primary source of income for the vast majority of people in the country. As staff play an important role in providing services to the farmers, there well being in the organization and with the organization should be taken care of. Keeping this in mind, the research was conducted to study their attitude towards the organization by constructing a suitable scale.

METHODOLOGY

An attitude is defined as positive or negative feelings of an individual towards a person, thing, place or event in varying degree of favorableness or unfavorableness. Summated Rating Method developed by Likert (1932) and Thurston's Equal Appearing Interval scale (1946) were used for the construction of the scale with some modifications as it allows selecting statements based on the discriminating power. However, both approaches have drawbacks, the first in obtaining a discriminating response and the second in the item selection. As a result, the method 'Scale Product Method' was used to develop the attitude scale which incorporates Thurston's Equal Appearing Interval technique scale for item selection and Likert's Summarization Methods rating to determine the outcome of the scale was used as suggested by Eysenck & Crown (1949).

RESULTS

To measure the attitude of the staff, initially 60 statements were selected from various sources of literature like books, internet, articles, papers, journals, magazines, etc. and consultation with extension experts and researchers. Further, the statements were edited using Thurstone and Chave (1929) and Edwards and Kilpatrick (1948) fourteen criteria and 48 statements were finalized for further analysis.

Relevancy test

To test the relevancy of the statements, 48 statements were mailed to 100 judges in the field of Extension education with necessary instructions. The judges were instructed to indicate their responses on 3- point continuum with scores "Three for Most Relevant", "Two for Relevant" and "One for Least Relevant". Out of these 100 judges, 34 judges responded with in the given period. For the obtained data, Relevancy Percentage (RP), Mean Relevancy Score (MRS) and Relevancy Weightage (RW) were calculated for all the statements.

With the help of the above criteria, the statements having relevancy percentage more than 82.10, mean relevancy score more

than or equal to 2.22 and relevancy weightage more than 74.24 were screened for further analysis. Based on the above values, 25 statements were qualified for item analysis and further modified according to the experts suggestions.

Item analysis

An important step in the Likert technique for constructing a valid and reliable scale is Item analysis. It is important to differentiate the items based on the extent to which they differ the more favorable respondents from the less favorable respondents in terms of their attitude towards the organization. The schedule consisting of 25 statements was administered to a sample of 32 respondents in non sampling area and were asked to indicate their favorableness or unfavorableness on a five point continuum with scores viz., "Five for Strongly Agree", "Four for Agree", "Three for Undecided", "Two for Disagree" and "One for Strongly Disagree" for positive statements and vice versa for negative statements. After computing the scores, the respondents were arranged in ascending order of their scores. For item analysis, the top 25 percent i.e., 8 respondents and the bottom 25 percent i.e., 8 respondents were selected. The two groups form criterion groups for evaluating the individual items as stated by Edwards (1969). The critical ratio "t-value" which is a measure used to describe the extent of differentiation between the high and low score groups for each statement is calculated using the following formula:

$$t = \frac{\bar{X}_H - \bar{X}_L}{\sqrt{\frac{S_H^2}{n_H} + \frac{S_L^2}{n_L}}}$$

Where,

$\bar{X}_H$ = the mean score on a given statement for the high group

$\bar{X}_L$ = the mean score on the same statement for the low group

S^2_H = the variance of the distribution of responses of high group to the statement

S^2_L = the variance of the distribution of responses of low group to the statement

n_H = number of subjects in the high group;

n_L = number of subjects in the low group

After calculating the 't' values of all the statements, the statements having 't' values less than 1.75 were rejected following the thumb rule (Bird, 1940). From the total of 25 statements, 11 statements were rejected and 14 statements including 10 positive statements and 4 negative statements presenting a new idea to measure the attitude were finalized and included in the scale. The validity and the reliability of the scale were assured for the standardization.

Validity of the scale

To test the validity of the scale, content validity was used. When the content of the individual item or the whole items represents the content to be measure or tested, it is said to have content validity.

Table 1. Final statements to measure the attitude of staff towards farmer producer organization with 't' values

S.No.	Statements	't' - value
1*.	I feel there is little work done at FPO and more propaganda made	3.32
2.	FPO suggests for diversification of crops to its members to minimize risk	3.35
3.	I observed that FPO promotes group cohesiveness among the members	3.56
4*.	I observed that FPO faces shortage of inputs supply during peak season	2.76
5.	I observed that members of FPO are getting benefitted from the agricultural practices/packages/technologies provided by the organization	3.46
6.	I think at FPO marketing, technical and processing skills of the farmers/producers are improved	5.00
7.	I think FPO is an innovative organizational setup	3.79
8*.	I observed that equipments provided under custom hiring services through FPO are not in sufficient number	4.32
9.	I feel the concept of FPO is good for the development of small and marginal members	7.75
10.	The organization considers about the staff suggestions in decision making and planning	2.75
11	I think FPO acts as a key agent in the agricultural development	6.35
12*.	I think FPO does not focus on the capacity building of the members and the staff	3.42
13.	I observed that primary processing activities like cleaning, processing, grading, etc and grading are provided in the FPO	4.24
14	I believe that FPO helps in elimination of middlemen from the market chain	5.34

*Indicates negative statements

Reliability

To measure the reliability of the scale, split half method was used (Helen et al., 2009 & Shelar et al., 2022). For this, the statements were split into two sets based on even and odd number of items. Then they were administered to 32 respondents to obtain two sets of scores. The Pearson's product moment correlation coefficient was calculated which was further corrected using Spearman's Brown formula. The Correlation Coefficient for the two sets was 0.84 and was found to be significant at 0.01 level of significance indicating reliability of the scale developed.

DISCUSSION

Despite the intensive and growing studies on FPOs, there are few studies on this aspect. It used Edwards criteria to finalize the statements for relevancy test and the statements whose values are more than the calculated relevancy percentage, mean relevancy score and relevancy weightage values were selected for item analysis which indicates that the statements were relevant to the study when compared to other statements. Further, the statements were selected having t-values more than 1.75. Moreover, the scale values for all the statements were highly discriminating, indicating that the statements were effective in differentiating high favorable from low favorable. As the content of the scale covered literature review, trusted sources like journals, text books and experts opinion thoroughly, it is assumed to satisfy the content validity. The major contribution of this research is the construction and the validation of a measurement scale to measure the attitude of FPO staff towards the organization. Earlier studies have developed a scale for measuring farmers' attitude towards the organization, however, this scale measures staff attitude. The scale has been tested and validated through a representative sample. Through this addition, it is hoped that this research will open the way to future research and awaken the boldness among researchers from outside the box to apprehend new original issues. This is especially true and important in case of FPOs as this are the fast growing institutions to help farmers.

CONCLUSION

The scale was developed to measure the attitude of staff towards the farmer producers organization using scale product method. Initially, 60 statements were collected and were reduced to 48 statements after refinements. Based on the scores of relevancy test and item analysis, 14 statements consisting of 10 positive and 4 negative were finalized in the scale. The correlation coefficient was 0.84 which indicates that the scale is reliable. Thus, the scale developed can be used for further studies with suitable modifications.

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