

CONSTRUCTION OF SCALE FOR PERCEPTION OF FARMERS TOWARDS FARMER PRODUCER ORGANIZATION

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ABSTRACT

Farmer Producer Organization (FPO) is a farmer's institution where group of 10-15 farmers collectively form an informal group and work together to increase the income at village level. To determine and notice how the farmers perceive about the FPO, the scale to measure perception was developed. On the basis of 14 criterion advocated by Edward and Likert, 37 statements were framed. To find out the content validity of the statements, the expert judges who had sound knowledge about the concept were selected and then the statements were administered to them. t test was administered to finalize the statements, t value more than 1.75 were included to develop the scale. Thus, 25 statements were finalized, 23 positive and 2 negative statements. Reliability of the statement determines how reliable the statements are to develop the scale odd-even and spearman brown formula was incorporated to find reliability. Final 25 statements were selected with reliability r value of 0.66 and spearman brown formula 0.77 was calculated.

Keywords: perception, FPO, farmers, income, institution

INTRODUCTION

Agriculture sector plays an important role in the Indian economy by being largest contributor of Gross domestic product and also the major per cent of rural population depends on agriculture and its allied activities for livelihood. In recent times, Government of India has made immense efforts to increase production, but to their effort, increase in the production has not witnessed in income of cultivars. To double the farmers income Government of India came up with various strategies, schemes and project like self-help group, farmers club, farmers interest groups and various others among them the recently received focus was farmer producer organizations which came up on the recommendation of an expert panel led by Y. V. Alagh amended under the Indian Companies Act, 1956 in 2002-03 to provide for producer companies.

Farmer producer organizations are key institutions for the empowerment, poverty alleviation, and advancement of farmers and rural poor (FAO, 2006). FPC is a group of primary producers/ farmers that come together as a Producer Organisation (PO) and register themselves under the Indian Companies Act 1956 as a producer company. A Farmer Producer Company is a hybrid between cooperative societies and private limited companies. A producer organization is an association, a society, a cooperative, a union, a federation, or even a firm that has been established to promote the interests of farmers (SFAC guidelines).

The producer organizations (POs) are formal rural organizations whose members are smallholder farmers who organize themselves with the objective of improving farm income through improved production, marketing, and local processing activities (Khan *et al.*, 2020).

Collectivization of farmers into group of between 15-20 members at the village level (called Farmer Interest Groups or FIGs) and building up their associations to an appropriate federating point i.e. FPOs. FPO is one of the important initiatives taken by the DA of the MoA to mainstream the idea of promoting and strengthening member-based institutions of farmers (Krishna DK *et al.* 2018.). As per the concept, farmers, who are the producers of agricultural products, can form groups and register themselves under the Indian Companies Act. (Amani, 2016). FPO aims at developing the skill, revenue and bargaining power of the smallholder farmers in the production and marketing of the produce, the income, production and livelihood of the farmers. Technical knowledge to its beneficiaries, improve their production efficiency, reduce the transaction costs, market the final produce and are even successful in capacity building thereby, fabricating the social capital. Indian government is encouraging new form of collectives i.e., Farmer Producer Organization to address the challenges and hurdles faced by Indian farmers and in the era of globalization and climate change, PO are regarded as only institutional option to safeguard the interest of cultivars and benefit them through gaining higher level of profits and it is gaining more

popularity in the recent years among the farmers/producers and supporting agencies (Khan et al., 2020.). In this context the scale to measure the perception of farmers towards FPO is tried to study the perception of farmers towards farmer producer organization.

OBJECTIVE

To develop and standardize the scale to measure the perception of farmers towards FPO

METHODOLOGY

To measure the perception of farmers towards farmer producer organization, a scale was developed for the study by adopting Likert (1932) method of summated ratings. Set of standard procedure was considered to measure the perception of farmers towards farmer producer organization. A tentative list of 37 items related to the Farmer producer organization and their benefits perceived by the farmers was collected from various sources i.e., secondary data, workshops, project report and experts' consultation. Positive and negative statements were prepared to reduce the biasness. The items were corrected and edited in accord with the 14 informal criteria proposed by Likert and Edwards (1932). After excision twenty-five items were kept out of thirty-seven items.

Based on screening, 25 statements were finally selected. The selected 25 statements were then subjected to judge's opinion on a five-point continuum ranging from strongly agree to strongly disagree, because five continuum process gives more freedom to experts for their choice (Edwards, 1969). The list of statements was then electronically mailed to 150 judges who have proficiency in the area. Out of 150 judges, 64 judges responded by sending their judgement with in a period of one month and their response was considered for evaluation further.

Item analysis is a major and essential step in developing valid and reliable scales (Lal et al., 2014). The judges were asked to rate every item on a five-point scale ranging from five for Strongly Agree (SA), four for Agree (A), three for Undecided (UD), two for Disagree (DA), and one Strongly Disagree (SD) for positive items and the scoring pattern is reversed for the negative items. Lastly, the total individual judges scores were calculated by adding the scores of each item. Based on the total individual scores, the respondents score against each item were arranged in a descending order and formed into two groups, i.e., high group and the low group for evaluating the individual items. The higher group comprised the top 25 per cent of judges with their total individual scores and the lower group comprised the bottom 25 per cent of judges with their total

individual scores (Mukesh, 2016). With the help of these criterion groups, t value was calculated for each statements of the proforma by using the under mentioned formula (Edwards, 1969). Thus, out of sixty-four judges to whom the statements were administered for the item analysis, seventeen judges with highest score and seventeen judges with lowest scores were used as criterion groups to evaluate individual statements (as followed by Patel et al., 2022 and Vinaya et al., 2016). Spearman brown formula and odd-even method was used to study the reliability of the perception scale. The content validity of the scale was tested, which was confirmed by expert judgment, as the content's representativeness of sampling adequacy.

$$t = \frac{\bar{X}_H - \bar{X}_L}{\frac{\sum(X_H - \bar{X}_H)^2 + \sum(X_L - \bar{X}_L)^2}{n(n-1)}}$$

Where,

t= the extent to which a given statement differentiates between high and low groups.

XH= the mean score on a given statement for the high group

XL= the mean score on a given statement for the low group

$\sum(X_H + \bar{X}_H)^2$ =the variance of the distribution of respondents for the high group to the statements

$\sum((X_H - \bar{X}_H))^2$ =the variance of the distribution of respondents for the low group to the statements and

n= number of subjects in low or high group

RESULTS AND DISCUSSION

A total, thirty-seven items were used for t-value calculation but the item having t- value higher than 1.75 was selected for final inclusion in the perception scale, and others were rejected (Likert, 1932 and Thurstone 1961). Thus, only twenty-five (23 positive and 2 negative) items were unified in the final scale for measuring the perception of farmers toward farmer producer organization. Table 1 indicates that most of the farmers were having a positive attitude about farmer producer organization that ranged from medium to high. The t-values are significant at a 5% level of significance. Both type items, i.e., positive (+) and negative (-) were incorporated in the scale to minimize the effects of social attractiveness and positive response bias. The items 17 and 18 were negative, whereas the others were all positive (Table 1). The items, with a t-value of less than 1.75 were dropped from the further process of scale development.

Reliability and validity of the scale

Reliability refers to the accuracy or precision of the measuring instruments by accuracy we try to study how far our measures are free from errors or how much error is there in the measuring instrument. For reliability testing in the odd even, the coefficient of correlation was found as 0.628. Spearman Brown formula for which the value was 0.771. which was significant at 1% level of significant.

$$\gamma_{SB} = \frac{2rr_{hh}}{1+r_{hh}} = \frac{2 \times 0.628}{1+0.628} = 0.771$$

Content validity

Content validity is evaluated by determining the degree to which the items of a scale/test represent the universe of content of the object phenomenon being measured by it

and their adequacy.

Administration of test

The final constructed scale containing 25 items can be administrated to farmers on a five-point scale: five for strongly agree (SA), four for Agree (A), three for neutral (N), two for disagree (DA), and one for strongly disagree (SDA) and the reverse scoring pattern for negative items. The highest and lowest possible scores range from 125 and 60. The farmers are categorized in low, medium, and high level of perception based on the mean and standard deviation. The higher result indicates that the farmers have a favourable view towards farmer-producer organization.

Sr. No.	Statements	t value
1	FPO helps create opportunities for involvement in value addition and processing	2.63*
2	FPO improves access to reliable market information and management skills of farmers	5.19*
3	FPO helps in building good rapport with the extension personnel	4.21*
4	FPO helps in improving access to post harvest infrastructure by farmers	6.94*
5	FPO ensures timely availability of credit and assess to inputs to the farmers	2.87*
6	FPO provides strong market linkages	2.67*
7	FPO helps in enhancing the knowledge about the good agricultural practices	3.88*
8	FPO helps in increasing the self-confidence of farmers	5.11*
9	FPO helps farmers to overcome from production and marketing risk	4.76*
10	FPO helps to enhance the socio-economic status of farmers	5.74*
11	FPO enhances buying capacity and bargaining power of farmers	3.2*
12	Male and female are given equal chance of participation and control over resources in FPO	6.82*
13	Dependence on middlemen is reduced and helps in direct marketing in FPO	5.05*
14	FPO enhances decision making power of its members	7.69*
15	FPO helps in capacity building of its members	2.94*
16	FPO is the greatest support system to economically weaker farmers	2.82*
17	It is difficult for farmers to adopt new technologies in FPO (-)	5.56*
18	Credit availability for FPO is hefty process (-)	4.46*
19	FPO helped increasing the performance in present position of its members	3.47*
20	FPO helps in rendering additional revenue through farming activities	4.50*
21	Effective utilization of available resources is highly possible through FPO	3.97*
22	FPO helps in enhancing the nutritional and food security of my family	5.51*
23	FPO helps in reducing the input cost	4.6*
24	FPO helps in increasing lobby and advocacy of farmers	3.66*
25	FPO improves rural economy and provide job opportunities at village level	4.16*

CONCLUSION

Though farming has been major source of income for the Indian economy, still it lacking the positive attitude by the youth towards farming and moving towards other income

sources for their livelihood. Government is struggling hard to retain rural youth towards agriculture and so enormous schemes and projects were formulated for retaining rural youth in farming and making them aware regarding various opportunities in agriculture for income generation. Among

such farmer producer organization is one such where rural people are made aware about various business and income generating activities available for income. Purpose of current paper is to make an understanding of the benefits about farmer producer organization and make more efforts in developing awareness among other agrarian sector towards farmer producer organization. The study found that FPOs help enhancing the socio-economic status of the farmers, and reduces the input cost, building the capacity of the farmers by increasing the self- confidence and decision- making bargaining power, providing post-harvest opportunities, strong market linkages and better job opportunities at village level. The result would help in formulating appropriate strategy based on the perception of farmers towards FPO.

CONFLICT OF INTEREST

This is to declare that there is “No conflict of interest” among researcher.

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