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A study on participation and constraints of farmers in Farmer Producer Organization (FPO) activities

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Abstract

The present study, entitled “A Study on Participation and Constraints of Farmers in Farmer Producer Organization (FPO) Activities,” was undertaken to assess the socio-economic characteristics, extent of participation and major constraints faced by FPO member farmers. The study considered 15 independent variables, namely age, education, occupation, family size, landholding, annual income, farming experience, sources of information, membership duration in FPO, access to extension services, training exposure, market orientation, risk orientation, innovativeness and awareness about FPO activities, while the extent of participation in FPO activities was treated as the dependent variable. Data were collected from FPO member farmers and analyzed using frequency, percentage, mean, standard deviation and Chi-square test. The findings revealed that the majority of respondents belonged to the middle-age group (56.67%), had high school education (26.67%), possessed small landholdings (35.00%) and had high farming experience (55.00%). Most respondents had medium levels of information source utilization (56.66%), extension access (53.34%), training exposure (58.33%), market orientation (60.00%), risk orientation (56.67%), innovativeness (58.34%) and awareness about FPO activities (60.00%). The extent of participation was predominantly medium (58.33%), followed by high (21.67%) and low (20.00%) participation. The major constraints reported by farmers were inadequate training and capacity building (71.67%), poor awareness about FPO benefits and functions (68.33%), limited access to credit and financial support (65.00%) and weak market linkages and price realization (63.33%). The study concludes that strengthening training and capacity building, improving awareness, facilitating access to finance and developing effective market linkages are essential for enhancing farmers’ participation and improving the overall performance and sustainability of FPOs.

Keywords: Farmer producer organization, FPO members, farmer participation, socio-economic characteristics, constraints, market linkage, capacity building

Introduction

Agriculture remains a major source of livelihood in India, particularly for small and marginal farmers who face challenges such as fragmented landholdings, limited access to quality inputs, inadequate infrastructure, weak bargaining power and difficulties in obtaining remunerative prices. In this context, Farmer Producer Organizations (FPOs) have emerged as an important institutional mechanism for collectivizing farmers and improving their access to inputs, technology, finance and markets. Through collective action, FPOs facilitate bulk procurement of inputs, aggregation of farm produce, value addition, collective marketing and direct linkages with buyers, thereby helping farmers reduce transaction costs and improve their bargaining position. The Government of India has also promoted FPOs through the scheme for Formation and Promotion of 10,000 FPOs to strengthen farmer collectivization and agricultural value chains (Ministry of Agriculture and Farmers Welfare, 2020; NABARD, 2023) ^[5, 6].

The effectiveness of FPOs largely depends on the active participation of their member farmers in meetings, decision-

making, training programmes, collective input procurement, production planning and marketing activities. However, factors such as inadequate awareness, limited managerial capacity, insufficient working capital, poor infrastructure, weak market linkages, transportation problems and low member involvement may constrain the effective functioning of FPOs (NABARD, 2023) ^[7]. Although FPOs have expanded considerably across India, there is a need for location-specific assessment of farmers’ participation and the difficulties experienced by members. Therefore, the present study entitled “A Study on Participation and Constraints of Farmers in Farmer Producer Organization (FPO) Activities” was undertaken to assess the socio-economic and farm characteristics of FPO member farmers, determine their extent of participation in FPO activities and identify the major constraints faced by them, with a view to suggesting suitable measures for strengthening FPOs.

Materials and Methods

The data collected from the FPO member farmers were systematically coded, tabulated and analyzed using

appropriate statistical techniques. Frequency, percentage, mean and standard deviation were used to describe the socio-economic and farm characteristics of respondents and their extent of participation in FPO activities. Frequencies and percentages were used to present the distribution of respondents across different categories, while mean and standard deviation were used to determine the central tendency and variability of the observed characteristics. These statistical measures helped in presenting the findings in a clear and meaningful manner.

To assess the extent of participation of farmers in FPO activities, suitable scores were assigned to different participation-related statements and the respondents were categorized based on their overall participation level. The independent variables considered in the study included age, education, occupation, family size, landholding, annual income, farming experience, sources of information, membership duration in FPO, access to extension services, training exposure, market orientation, risk orientation, innovativeness and awareness about FPO activities, while the extent of participation was considered as the dependent variable. Appropriate statistical measures were applied to examine the distribution and variation among respondents. The Chi-square test was used to determine the association between selected independent variables and the extent of farmers' participation in FPO activities. The test helped to identify whether the observed relationship between the categorical independent variables and participation level was statistically significant. The calculated value of Chi-square was compared with the tabulated value at the appropriate degrees of freedom and level of significance. The results obtained through these statistical techniques were used to draw meaningful conclusions regarding the factors associated with farmers' participation and the constraints faced by FPO members.

Results and Discussion

The study considered 15 independent variables, namely age, education, occupation, family size, landholding, annual income, farming experience, sources of information, membership duration in FPO, access to extension services, training exposure, market orientation, risk orientation, innovativeness and awareness about FPO activities, to examine their influence on farmers' participation in Farmer Producer Organization (FPO) activities. The dependent variable was the extent of participation of farmers in FPO activities. The study also assessed the major constraints faced by FPO member farmers in participating effectively in various FPO activities.

Socio-Economic Characteristics Farmers

Table 1 presents the distribution of FPO member farmers according to their selected socio-economic and psychological characteristics. Regarding age, more than half of the respondents (56.67%) belonged to the middle-age group of 36–55 years, followed by 25.00 per cent in the old-age group and 18.33 per cent in the young-age group. In terms of educational status, the largest proportion of respondents (26.67%) had completed high school education, followed by middle school (23.33%), graduate (18.33%), primary (15.00%), illiterate (10.00%) and postgraduate (6.67%). With respect to occupation, 51.67 per cent of respondents

depended solely on agriculture, while 21.67 per cent were engaged in agriculture along with business, 15.00 per cent with service and 11.66 per cent with wage earning. Regarding family size, 60.00 per cent of farmers belonged to nuclear families, while 40.00 per cent belonged to joint families.

The distribution according to landholding size revealed that 35.00 per cent of respondents were small farmers, followed by marginal farmers (31.67%), semi-medium farmers (23.33%), medium farmers (8.33%) and large farmers (1.67%). Regarding annual income, nearly half of the respondents (48.33%) belonged to the medium-income category, while 28.33 per cent and 23.34 per cent belonged to low- and high-income categories, respectively. In terms of farming experience, the majority (55.00%) had high farming experience of 11 years and above, followed by 30.00 per cent with medium experience and 15.00 per cent with low experience. Regarding information sources utilization, 56.66 per cent of respondents had medium utilization, while 21.67 per cent each had low and high utilization. Similarly, FPO membership duration was medium (3–5 years) for 48.33 per cent of farmers, whereas 26.67 per cent and 25.00 per cent had low and high membership duration, respectively.

With respect to institutional and psychological characteristics, a majority of farmers had a medium level of access to extension services (53.34%), training exposure through FPO (58.33%), market orientation (60.00%), risk orientation (56.67%), innovativeness (58.34%) and awareness about FPO activities (60.00%). The findings indicate that most FPO members possessed a moderate level of institutional access, training exposure and psychological characteristics, suggesting considerable scope for further strengthening these attributes through regular training, extension support, market-oriented activities and awareness programmes. Finally, regarding the extent of participation in FPO activities, the majority of respondents (58.33%) belonged to the medium participation category, followed by 21.67 per cent with high participation and 20.00 per cent with low participation. Thus, the overall participation of farmers in FPO activities was predominantly medium, indicating the need for greater member involvement in decision-making, collective input procurement, training, marketing and other organizational activities.

The findings of the present study are supported by several earlier studies on Farmer Producer Organizations. Trebbin and Hassler (2012) ^[8] reported that producer companies in India primarily served smallholder farmers and that collective action improved their bargaining position and access to emerging markets. Bikkina *et al.* (2018) ^[2] found that FPOs have considerable potential to benefit small and marginal farmers through collective action, although inadequate capital remained an important constraint. Manaswi *et al.* (2018) ^[4] observed that rural literacy, market availability, institutional support and access to agricultural credit were significant factors influencing the performance of FPOs across Indian states. Datta *et al.* (2018) ^[3] specifically examined factors determining farmers' membership in producer organizations in Assam, highlighting the importance of farmer characteristics and participation-related factors in producer organizations. NABARD (2023) ^[6] reported that FPOs commonly face constraints related to working capital, transportation, timely input supply, managerial capacity and limited involvement of board

members. More recently, Aditi *et al.* (2025) ^[1] found that farmers' participation in FPOs in India remained relatively

low despite the expansion of FPOs, particularly among poor and marginalized farmers.

Table 1: Distribution of farmers according to selected socio-economic and psychological characteristics about farmers producer organization (FPO) activities

S. No.	Variable	Category I	F (%)	Category II	F (%)	Category III	F (%)	Category IV	F (%)	Category V	F (%)	Category VI	F (%)
1	Age	Young (up to 35 years)	22 (18.33)	Middle (36–55 years)	68 (56.67)	Old (above 55 years)	30 (25.00)	—	—	—	—	—	—
2	Educational status	Illiterate	12 (10.00)	Primary	18 (15.00)	Middle	28 (23.33)	High school	32 (26.67)	Graduate	22 (18.33)	Post graduate	8 (6.67)
3	Occupation	Agriculture	62 (51.67)	Agriculture + Service	18 (15.00)	Agriculture + Business	26 (21.67)	Agriculture + Wage earner	14 (11.66)	—	—	—	—
4	Family size	Nuclear family	72 (60.00)	Joint family	48 (40.00)	—	—	—	—	—	—	—	—
5	Land holding size	Marginal (up to 1 ha)	38 (31.67)	Small (1–2 ha)	42 (35.00)	Semi-medium (2–4 ha)	28 (23.33)	Medium (4–10 ha)	10 (8.33)	Large (above 10 ha)	2 (1.67)	—	—
6	Annual income	Low (up to ₹1,00,000)	34 (28.33)	Medium (₹1,00,001–₹2,00,000)	58 (48.33)	High (above ₹2,00,001)	28 (23.34)	—	—	—	—	—	—
7	Farming experience	Low (up to 5 years)	18 (15.00)	Medium (5–10 years)	36 (30.00)	High (11 years and above)	66 (55.00)	—	—	—	—	—	—
8	Information sources utilization	Low	26 (21.67)	Medium	68 (56.66)	High	26 (21.67)	—	—	—	—	—	—
9	FPO membership duration	Low (up to 3 years)	32 (26.67)	Medium (3–5 years)	58 (48.33)	High (6 years and above)	30 (25.00)	—	—	—	—	—	—
10	Access to extension services	Low	28 (23.33)	Medium	64 (53.34)	High	28 (23.33)	—	—	—	—	—	—
11	Training exposure through FPO	Low	24 (20.00)	Medium	70 (58.33)	High	26 (21.67)	—	—	—	—	—	—
12	Market orientation	Low	22 (18.33)	Medium	72 (60.00)	High	26 (21.67)	—	—	—	—	—	—
13	Risk orientation	Low	24 (20.00)	Medium	68 (56.67)	High	28 (23.33)	—	—	—	—	—	—
14	Innovativeness	Low	22 (18.33)	Medium	70 (58.34)	High	28 (23.33)	—	—	—	—	—	—
15	Awareness about FPO activities	Low	20 (16.67)	Medium	72 (60.00)	High	28 (23.33)	—	—	—	—	—	—
16	Extent of participation in FPO activities (Depended variable)	Low	24 (20.00)	Medium	70 (58.33)	High	26 (21.67)	—	—	—	—	—	—

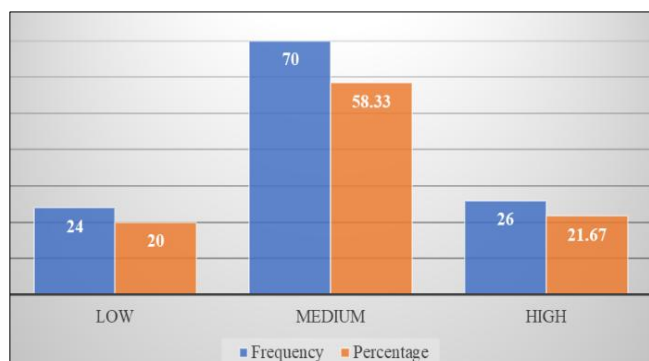


Fig 1: Distribution of Farmers According to Their Extent of Participation in Farmers Producer Organization (FPO) Activities

Constraints faced by FPO members

The Table 2 reveals that the major constraint faced by FPO members was lack of adequate training and capacity building, reported by 71.67 per cent of respondents and ranked first. This was followed by poor awareness about FPO benefits and functions (68.33%), limited access to credit and financial support (65.00%) and weak market linkages and price realization issues (63.33%), ranked II, III and IV, respectively. Inadequate storage and processing facilities were reported by 60.00 per cent of members and ranked fifth, while low participation in decision-making (53.33%) and lack of professional management and skilled staff (50.00%) ranked sixth and seventh. Further, 46.67 per cent of respondents reported insufficient government support and

follow-up, 45.00 per cent indicated poor digital literacy and ICT adoption and 41.67 per cent faced delayed payments from buyers and intermediaries. The least reported constraint was the need for stronger networking with input and output agencies (40.00%), although it remained an important area

for strengthening FPO performance. Overall, the findings indicate that capacity building, awareness creation, financial access and market linkage development should receive priority for improving the effectiveness and sustainability of FPOs.

Table 2: Constraints Faced by FPO Members and Suggested Measures for Strengthening FPO Performance

S. No.	Constraints / Suggestions and Measures for Strengthening FPO	Frequency	Percentage	Rank
1.	Lack of adequate training and capacity building of members	86	71.67	I
2.	Poor awareness about FPO benefits and functions	82	68.33	II
3.	Limited access to credit and financial support	78	65.00	III
4.	Weak market linkage and price realization issues	76	63.33	IV
5.	Inadequate storage and processing facilities	72	60.00	V
6.	Low participation of members in decision-making	64	53.33	VI
7.	Lack of professional management and skilled staff	60	50.00	VII
8.	Insufficient government support and follow-up	56	46.67	VIII
9.	Poor digital literacy and ICT adoption among members	54	45.00	IX
10.	Delayed payment from buyers and intermediaries	50	41.67	X
11.	Need for stronger networking with input and output agencies	48	40.00	XI

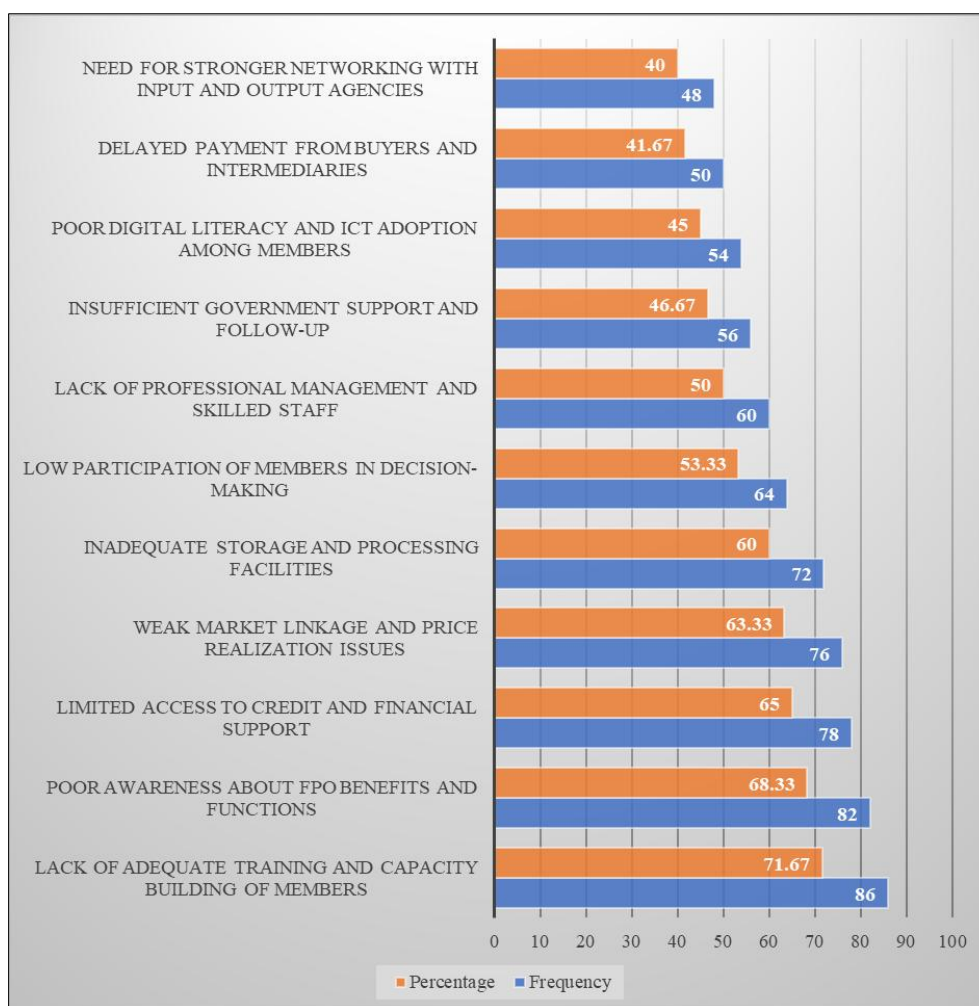


Fig 2: Constraints Faced by FPO Members and Suggested Measures for Strengthening FPO Performance

Conclusion

The study concluded that FPO member farmers were predominantly middle-aged (56.67%), had high school-level education (26.67%), belonged mainly to small landholding categories (35.00%) and had high farming experience (55.00%). Most respondents had medium levels of annual income (48.33%), information source utilization (56.66%),

extension access (53.34%), training exposure (58.33%), market orientation (60.00%) and awareness about FPO activities (60.00%). The overall extent of participation in FPO activities was medium for 58.33 per cent of farmers. The major constraints were inadequate training and capacity building (71.67%), poor awareness of FPO benefits and functions (68.33%), limited access to credit and financial

support (65.00%) and weak market linkages and price realization (63.33%). Thus, strengthening member training and awareness, improving financial and market support, enhancing storage and processing facilities and encouraging active participation in decision-making are essential for improving the performance, sustainability and effectiveness of FPOs.

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