

PERCEIVED EFFECTIVENESS OF FARMER PRODUCER ORGANISATIONS (FPOS) IN SOCIO-ECONOMIC UPLIFTMENT OF MEMBER FARMERS IN MAHARASHTRA

DERE AISHWARYA, BABITA KUMAR and RAKESH RATHORE*

School of Business Studies, Punjab Agricultural University, Ludhiana-141004

Date of Receipt : 24-03-2026

Date of Acceptance : 19-06-2026

ABSTRACT

This paper aims to study the effectiveness of Farmer Producer Organisations (FPOs) in the socio-economic upliftment of member farmers in Maharashtra as perceived by them. FPOs from three districts of Maharashtra were selected. All member farmers from 30 FPOs were selected as the population for the study. From each FPO, 10 farmer members were selected. A list of member farmers was obtained from each FPO based on their convenience, availability, and willingness to respond. Primary data was collected through a pre-structured and pre-tested questionnaire. Mean, percentage, one-sample t-test, were used for the analysis of collected data. Results of the study revealed that farmer members were aware of the business plan of FPOs (5.00), followed by awareness regarding the working of FPOs (3.72). Member farmers join FPO to get a better price for produce (5.00), enhance their income (5.00), and save on input cost (4.35). FPOs have enhanced their income by better realization for their produce (4.62), followed by FPO facilitating the availability of extension services (4.53). Member farmers were satisfied with FPOs business operations such as transparency in business operations (4.45) and enhancement in income on account of joining FPOs (4.41). The major reason to join the FPO was to increase the income, avoids involvement of middlemen and save input cost for the farmer members.

Keywords: Awareness, Belongingness, Benefits, FPO, Satisfaction

INTRODUCTION

Producer organizations enable farmers to get the benefits of their produce in the market because they help to improve market access and increase marketable surplus at the household level. The Farmer Producer Organization (FPO) are in the nascent stage of their empowerment of shareholder membership farmers and they need not only technical support but also adequate financial support to setup facilities, strengthen market linkages for sustaining their business

operations (NABARD National Paper – PLP, 2021). Farmers face a lot of challenges when in operation, like lack of market access and credit linkages, inadequate financial support, lack of managerial skills, training issues, withdrawal of support from funding organizations, etc. To overcome the problems of small and marginal farmers, the need of Farmer Producer Organization (FPO) was felt. FPOs fulfil forward and backward linkages, giving members need based support like bargaining power, economies of scale, and better prices. Small and marginal farmers, who

*Corresponding Author Email: rathore@pau.edu

are relatively younger, educated, and more informed have a greater probability of membership in FPOs and such participation leads to an increase in income. Social capital and self-efficacy play a major role in forecasting the performance of FPO (Pant *et al.*, 2024).

A study by Parthiban *et al.*, 2015, found that the majority 90 percent of the Tamil Nadu Mango Growers Federation members were involved in some social organizations. More than half of its members had a medium level of cosmopolitanism. Farm produce promotion society plays a proactive role in meeting the purpose of the organization, and the benefit-cost ratio was found to be increasing over the year (Talukdar & Vatta, 2025). Membership in the organization directly influences the socio-economic condition of the members. The income and employment of the members of the organization were significantly higher compared to the non-members. The study by (Kakati & Roy, 2021) revealed the financial performance of the FPOs was below par. Over time, liquidity and solvency trends of FPO were improving while other measures of performance such as efficiency and profitability were meagre.

To maximize the price received for the agricultural produce, the FPO can come up with the ideas of product differentiation and adopt an incentive-based model so that farmers in a group will participate actively. The government and non-government organizations are looking forward to the producer company as a component of economic development. Farmer collectives are viewed as an important element in linking smallholders with modern markets (input and output) as they provide many benefits for this interface. Producer's organisations not only help farmers buy or sell better due to scale benefits but also lower

transaction costs for sellers and buyers, besides providing technical help in production and creating social capital (Joshi *et al.*, 2018).

In order to build a sustainable Farmer Producer Organization, an ecosystem is needed besides certain policy reforms, particularly in the agricultural marketing systems like agri-logistics, infrastructure, technology and credit support, etc.). In this context, present study was carried out with objectives of to study the role of Farmer Producer Organizations in the socio-economic up-liftment of the member farmers in Maharashtra.

MATERIAL AND METHODS

The study was conducted in Maharashtra state of India during 2022. There were 771 Farmer Producer Organizations promoted by NABARD and SFAC operational in different districts of Maharashtra. The populations of the study consist of all the member farmers of the Farmer Producer Organizations of Maharashtra. Maharashtra is divided into 36 districts and out of these 36 districts; three districts with maximum number of registered Farmer Producer Organizations were selected. The districts with maximum number of FPOs are Pune (85), Ahmadnagar (34) and Nashik (48). Out of these district 10 FPO per district were selected conveniently. Hence total 30 Farmer Producer Organizations were selected. From each Farmer Producer Organization 10 members were selected based on their convenience, availability and willingness to respond. Therefore total 300 member farmers were selected and surveyed. List of member farmers was obtained from each of these Farmer Producer Organizations (FPO). Primary data were collected with the help of pre-structured and non-disguised interview schedule.

Table 1. Demographic profile of the respondents**(n=300)**

Profile	Frequency	Percentage (%)
Gender of respondents		
Male	244	81.33
Female	56	18.67
Age of respondents (years)		
26-35	56	18.67
36-45	59	19.67
46-55	62	20.67
56-65	84	28.00
Above 65 years	39	13.00
Education of respondents		
Illiterate	4.0	1.33
Below primary	30	10.0
Primary	18	6.00
Middle	61	20.33
Matric	76	25.33
10+2	73	24.33
Graduate and above	38	12.67
Type of family of respondents		
Nuclear family	168	56.00
Joint family	132	44.00
Total	300	100
Family size of respondents (no.)		
Upto 4 members	22	7.33
5-8 members	137	45.67
More than 8 members	141	47.0
Main occupation of respondents		
Agriculture	222	74.00
Services/other	56	18.67
Business	22	7.33
Subsidiary Occupation(s)*		
Dairy farming	60	18.98
Poultry Farming	46	14.55
Floriculture	55	17.40
Vegetable growing	155	49.05

Profile	Frequency	Percentage (%)
Source of information about FPO*		
Relatives/Friends	257	71.98
Village sarpanch	100	28.01
Member of any social organization		
Village Panchayat	21	17.79
Agricultural Society	13	11.0
Marketing Committee	10	8.47
Milk Collection Committee	15	12.71
Self Help Group	42	35.59
Cooperative Society/Bank	17	14.40
None	182	60.66
Total	300	100

(Source: Primary data) (*Multiple responses were taken)

To study the socio-economic upliftment of the members after joining the organization, the members of the FPOs were asked to provide information about social empowerment, perception of members, benefits and satisfaction regarding the Farmer Producer Organization etc. The questionnaire consisting of close ended questions on Likert scale (1 to 5 where 5=strongly agree 4=agree 3=neutral 2 disagree 1=strongly disagree). The collected data were grouped into tables and analysed using various statistical tools like percentage, mean score, standard deviation, one sample t-test and paired t-test

RESULTS AND DISCUSSION

Demographic profile of the respondents

The perusal of Table 1 showed that out of total respondents 81.33 percent were male farmers and 18.67 percent were female farmers. The majority of the farmers 28 percent were between 56-65 years age group followed by 20.67 percent were between 46-55 years age group. Majority of the farmers 25.33

percent were educated up to matric level followed by 24.33 percent were up to higher secondary level. The majority 56 percent were had nuclear family.

The perusal of Table 1 that the majority of the farmers 47 percent were had more than eight members in their family. The majority 74 percent members had agriculture as main occupation along with vegetables cultivation as subsidiary occupation. For majority of farmers 71 percent relatives and friends were important source of information to the farmers about FPO. The majority of FPO members 35.59 percent were also member of Self Help Group.

The respondents were asked to rate the statements in which different parameters regarding benefits were listed and were recorded on a five-point Likert Scale ranging from strongly disagree (1) to strongly agree (5) and one sample t-test was applied. The assumed mean have been compared with mid value scale ($\mu=3$)

Table 2. Awareness, involvement and belongingness of member farmers of FPOs
(n=300)

Statements	Mean	SD	t-value	p-value
Extent of awareness regarding the business plan of FPO	5.00	0.00	-	-
Extent of belongingness with FPO	3.86	0.84	17.70	<.001
Extent of awareness regarding the working of FPO	3.72	0.44	27.95	<.001
Extent of awareness regarding the business model of FPO	2.85	0.79	-3.34	<.001
Extent of awareness regarding the working of Cluster-Based Business Organization (CBBO)	2.40	0.49	-21.32	<.001
Extent of involvement in creating business plan for FPO	1.00	0.00	-	-
Extent of involvement in routine FPO activities	1.00	0.00	-	-
Overall mean	2.83	0.36	5.24	<.001

(Source: Author computation from primary data)

Table 2 showed that members were aware about the business plan of the FPO among the members (5.00). The extent of belongingness with FPO (3.86) and awareness regarding the working of FPO was quite high (3.72) results in line with study of (Shivanjali & Jahanara, 2024). Awareness regarding the business model of FPO was less (2.85) and awareness regarding the working of Cluster-Based Business Organization (CBBO) was least (2.40). Least mean score was observed to the statement extent of involvement in creating business plan for FPO (1.00) and extent of involvement in routine FPO activities (1.00)

Table 3 depicted that primary reason to join the FPO was to increase the income (5.00) and get good prices (5.00) result in line with finding of (Joshi *et al*, 2018). Farmers get the better bargaining and negotiation power was equally important for member farmers (4.99). Least important reasons were to connect with other members (2.15) and for gaining employment (1.47). A study by Aditi *et*

al., (2025) suggested a positive correlation between FPOs involvement and higher per capita family income, especially within economically deprived farming segments, supporting the argument that FPOs play a constructive role in enhancing farmers' financial outputs.

The perusal of Table 4 showed that highest mean difference was seen in the parameter that members shared information of any kind with other members (2.94). The members were also able to handle the adverse situations and crisis better for self and other (2.50). Followed by mean difference was members saw improvement in their social integration and cooperation among members (2.10). All the statements indicated that there was significant up-liftment in the social status of the farmers after joining the FPO. The study by (Jha & Singh, 2025) FPOs, mainly women-led have further empowered women farmers to access markets, increase incomes, and strengthen their role in the agricultural value chain as well.

Table 3. Reasons to join FPOs**(n=300)**

Statements	Mean	S.D.	t-value	p-value
To get better prices of the produce	5.00	0.00	-	-
I understand FPO help in enhancing my income	5.00	0.00	-	-
To enjoy better bargaining and negotiation power	4.99	0.08	42.55	<.001
To avoid high interest and commission of middlemen	4.47	0.50	51.12	<.001
I understand FPO help in cost savings for inputs	4.35	0.68	34.23	<.001
Easy access to financial services	4.11	0.71	26.84	<.001
For better handling of produce and avoid post-harvest hassle	3.99	0.73	23.52	<.001
To get benefit of branding, export and packaging, etc.	3.98	0.65	25.95	<.001
To get information about latest government schemes and programs	3.94	0.70	23.37	<.001
To get timely information regarding market, weather, agricultural technology and extension services	3.88	0.76	19.88	<.001
To avail transportation and warehousing facility	3.88	0.72	20.98	<.001
For connecting with other members	2.15	0.44	-33.35	<.001
Overall	3.93	0.52	44.85	<.001

(Significant at 1% level)

Table 5 revealed FPO members have positive perception about benefits of FPO as members. The highest mean score was observed to the statement FPO has enhanced my income by better realization for their produce (4.62) followed by FPO facilities availability of extension services (4.53) and FPO has provided an opportunities to connect with consumers and market (4.49). Overall farmers' members were getting benefits of FPO as members. Educated youth of should join the FPO and join the training program organised by the FPO as it will be help in enhancement of income and reduce the unemployment level. Member farmers of market-centric FPOs revealed significant advantages (Prabhavathi *et al.*, 2024). Similar study by (Sharma *et al.*, 2023; Pasupuleti *et al.*, 2025) found being a

member of FPO; farmers experienced an increase in output value and income of farmers.

Table 6 revealed that the FPO does not have a formal organizational structure (3.47) finding in support of finding of (Kujur *et al.*, 2019). Members had fewer problems regarding the cohesion of members (1.80) and there was no issue with respect to priority given to large farmers over small farmers (1.24). The overall mean was found to be (1.66) and factor was significant. There was relatively more problem regarding the dependence on limited directors (1.79) than other two parameters i.e., problem regarding participation by the members (1.61) decision power to few board of director (1.33). The problem regarding the product development has found to be significant (1.56).

Table 4. Social empowerment of members by FPOs
(n=300)

Statements	Means difference	SD	t-value	p-value
I share the information of any kind with other members for their benefit	2.94	0.74	68.56	<.001
I am able to handle the adverse situations and crisis better for myself and others	2.50	0.81	53.34	<.001
I see an improvement in the social integration and cooperation among members	2.10	1.01	35.78	<.001
I do the post-harvest waste disposal using environment friendly techniques	1.98	1.02	33.47	<.001
My image among my fellow farmers and in society has improved	1.59	0.81	33.71	<.001
I feel sense of leadership in myself after joining FPO	1.27	1.34	16.35	<.001
I am more open to new technologies and help others in adopting improved technology	1.01	1.14	15.40	<.001
There is improvement in my communication skills	0.97	1.12	15.06	<.001
I feel motivated in doing social work	0.83	0.97	14.74	<.001
I participate in village administration and improvement of village	0.70	0.95	12.73	<.001
I participate in social activities for social upliftment of villagers	0.40	1.01	6.82	<.001
Overall	1.48	0.99	27.81	<.001

(Source: Author computation from primary data)

The less pressing were the problems like trust issues between members (1.33) transparency of functioning of FPO (1.25). FPOs did not face marketing related issues (1.31) or there was no problem while creating contact with markets (1.26). FPO did not face quality issues (1.27). The farmers did not feel that the products of FPO is not price competitive (1.32). All statements were found to be significant at 1% level of significance. The perusal of Table 7 that highest mean score was observed to the statement transparency in business operation and accounts (4.45). This can be attributed to that the members were satisfy with

transparency in business activities of an FPOs followed by enhancement of income on account of joining of FPOs (4.41) and regularity of meeting held with members similar results were reported by (Navya *et al.*, 2022). Least mean score was corresponded to the statement opportunities for participating in FPOs decision making (2.98). Similarly (Singha *et al.*, 2024) reported majority 70 per cent members of FPOs had reported medium level of achievement of FPOs, still there is huge scope for their further enhancement and achievement in agriculture and allied activities and thereby enhance their income on sustainable basis.

Table 5. Benefits to members of FPOs**(n=300)**

Statements	Mean	SD	t-value	p-value
FPO has enhanced my income by better realization for my product(s)	4.62	0.48	58.15	<.001
FPO facilitates the availability of extension services	4.53	0.72	36.28	<.001
FPO has provided me the opportunities to connect with the consumers/markets	4.49	0.64	40.24	<.001
I receive timely information from FPO regarding new farming schemes launched by government and non-governmental agencies	4.38	0.95	24.93	<.001
FPO has help me to save on my input cost	4.25	1.01	21.25	<.001
FPO helps me to access better information regarding choice of crop/product, price and technologies	4.25	0.91	23.57	<.001
FPO has provided me the opportunities to connect with other members (physically and digitally)	4.24	1.10	19.43	<.001
FPO helps me to access better information regarding the weather conditions	4.12	1.02	18.94	<.001
FPO has facilitated the availability of agricultural inputs for me	4.09	0.70	26.98	<.001
FPO has provided me the opportunity to train in various agricultural technologies and subsidiary occupations	3.93	0.72	22.53	<.001
FPO membership has inculcated a sense of entrepreneurship	3.81	0.74	18.93	<.001
FPO provides well-built infrastructure (warehousing, Transportation processing etc.)	3.79	0.95	14.39	<.001
Because of FPO I feel I can reach out to others in times of crisis	3.60	0.71	14.75	<.001
I receive employment opportunities for myself and my family members	3.35	0.65	9.25	<.001
Overall	4.10	0.80	24.97	<.001

(Source: Author computation from primary data)

The formation of the Farmer Producer Organizations was considered to bring farmers together to bring them out of vicious circles of the poverty. It is combining the efforts of the farmers by collective bargaining; marketing and

bulk purchasing of inputs can bring profits to the farmers' results in line of (Michalek *et al.*, 2018). Majority FPOs had 250-499 members and had more than 80 per cent active farmers with 18.6 per cent female members in the FPOs. The FPOs sought help from the

Table 6. Perception of members regarding FPOs (n=300)

Statements	Mean	SD	t-value	p-value
FPO does not have a formal organizational structure	3.47	0.94	3.05	<.001
FPO is not having the required infrastructure	2.26	1.33	-9.63	<.001
FPO is not able to undertake the required level of value addition	2.18	1.14	-12.36	<.001
CEO is not having adequate business skills	1.98	0.95	-18.45	<.001
Continuity of sales around the year is a challenge in market place	1.94	1.13	-16.22	<.001
There is conflicts in FPO members	1.86	1.04	-18.94	<.001
Operational of FPO are not undertaken in regular manner	1.83	0.74	-26.98	<.001
All the members are not involved in group activities	1.83	0.97	-20.67	<.001
There is lack of cohesion among FPO members	1.80	1.08	-19.10	<.001
There is too much dependence on limited number of directors/members	1.79	1.10	-19.05	<.001
FPO has not been able to create a viable business plan	1.78	0.78	-26.82	<.001
Very few numbers of active members are there	1.77	0.99	-21.44	<.001
FPO lacks financial prudence	1.77	0.89	-23.76	<.001
There is lack of participation from FPO members	1.61	0.99	-24.17	<.001
There are implementation issues related to business plan	1.59	0.66	-36.73	<.001
FPO is suffering from poor credit linkages	1.59	0.67	-36.07	<.001
There is problem of poor product development	1.56	0.68	-36.20	<.001
Lack of expert advice in extension services, financial services etc.	1.56	0.75	-33.02	<.001
Board of Directors do not possess business acumen	1.49	3.19	-8.14	<.001
Only few members/Board of directors control decision making	1.33	0.47	-61.69	<.001
There are trust issues among FPO members	1.33	0.47	-61.41	<.001
FPO products are not price competitive	1.32	0.46	-62.57	<.001
FPO faces marketing related problems	1.31	0.46	-63.50	<.001
FPO products suffer from quality issues	1.27	0.44	-67.38	<.001
Business plan of FPO is not communicated to the members	1.26	0.44	-67.43	<.001
FPO is not able to connect with the markets	1.26	0.43	-68.59	<.001
Lack of transparency in the functioning of FPO especially related to financial matters	1.25	0.43	-69.44	<.001
Large farmers get priority over the small farmers	1.24	0.42	-71.25	<.001

(Source: Author's computation from primary data)

Table 7. Satisfaction level of members of FPOs**(n=300)**

Statements	Mean	SD	t-value	p-value
Transparency in business operations and accounts	4.45	0.98	25.43	<.001
Enhancement in income on account of joining FPO	4.41	0.94	25.71	<.001
Regularity of meetings held with members	4.35	1.03	22.66	<.001
Social empowerment being a member of FPO	4.31	1.05	21.50	<.001
Communication of business plan to the members by board of directors	4.11	1.32	14.56	<.001
Opportunities for participating in FPO business activities	3.66	0.96	11.80	<.001
I satisfy with overall performance of FPO	3.63	0.77	14.14	<.001
Enhancement in Nutritional, Educational, and Habitat security	3.45	0.91	8.42	<.001
Opportunities for participating in FPO decision making	2.98	0.71	-.56	0.57
Overall	3.92	0.96	15.96	<0.06

(Source: Author's computation from primary data)

experts to prepare the financial statements and for preparation of financial budget. FPOs prepared a business plan for period of an annum and modified the plan every quarter or on need basis.

CONCLUSION

The findings implicated that FPOs helps in enhancing member farmers' income by better realization of their produce and FPOs also helps members to connect them with market. Farmers' members were aware about business activities of FPOs. Transparency in business operation and accounts followed by enhancement in income on account of joining of FPOs was important for satisfaction of farmer members. Farmer members also saved input cost in agriculture operations. The major reason to join the FPOs was to increase the income avoids involvement of middlemen and saving input cost of the farmers members to enhance the income, enjoy better bargaining and negotiation power, saving the cost on inputs and easy access to financial services. The farmers must be encouraged to participate

in the different activities undertaken by the FPOs.

REFERENCES

- Aditi, Rawat, R. K., Acharya, D. and Parida, J. K. 2025. Does participation in Farmer Producer Organizations (FPO) help boost farmers' income in India. *South Asia Economic Journal*, 26(1):77-94. <https://doi.org/10.1177/13915614251328534>
- Jha, S. and Singh, D. 2025. From financial inclusion to social transformation: NGOs, SHGs and FPOs in women empowerment. *Archives of Current Research International*, 25(10):34–46.
- Joshi, S. K. and Choudhary, V.K. 2018. Performance of Farmer Producer Organizations (FPOs) in different regions of Chhattisgarh state: A case study. *Indian Journal of Agriculture Economics*, 73(3): 399-406
- Kakati, S. and Roy, A. 2021. Financial performance of Farmer Producer Companies of India: A study from 2013-

- 2014 to 2018-2019. International Journal of Rural Management, Retrieved from doi: 10.1177/ 09730052211034700 on 30.08.2021.
- Michalek, J., Ciaian, P., and Pokrivcak, J. 2018. The impact of producer organizations on farm performance: The case study of large farms from Slavakia. Food Policy 75:80-92
- Kujur, P., Gauraha, A.K., and Netam, O.K. 2019. The socio-economic impact of Farmer Producer Organizations in Chhattisgarh plains. Journal of Entomology and Zoology Studies, 7(9): 1104-06
- Navya, D., Madhu Babu, K., Naik, R., and Srikanth, V. 2022. A study on performance of Farmer Producer Organisations in Telangana state. Indian Research Journal of Extension Education, 22 (4): 112-117
- Parthiban, S.R., Nain, M.S., Singh, R., Kumar, S., and Chahal, V.P. 2015. Farmers' Producer Organization in reducing transactional costs: A study of Tamil Nadu Mango Growers Federation (TAMAFED). Indian Journal of Agricultural Science, 85:1303-7
- Pant, S.C., Kumar, S., and Joshi, S.K. 2024. Social capital and performance of farmers' groups in producer organizations in India: examining the mediating role of self-efficacy. Journal of Agribusiness in Developing and Emerging Economies, 14(3): 519-535. <https://doi.org/10.1108/JADEE-07-2022-015>
- Prabhavathi, Y., Siddayya, Ganapathy, M.S. and Girish, M.R 2024. An economic analysis of FPOs in the state of Andhra Pradesh: A comparative study based on business strategy. Indian Journal of Agricultural Economics, 79 (2):187-197
- Pasupuleti, S., Nikam, V., Veeram, H. and V, P. K. 2025. Farmer Producer Organization-based value chain to leverage the income of small farmers: An empirical evidence from India. Journal of Asian and African Studies, 61(4): 3343-3361.
- Singha, A., Sharma, J.K. and Singha, A.K. 2024. Critical analysis of group dynamics effectiveness of Farmer Producer Organisations (FPOs) members in Assam, India. Asian Journal of Agricultural Extension, Economics & Sociology, 42(2): 222-232
- Sharma, M., and Singh, R., Chiphang, S. and Prasad, A. 2023. Impact assessment study of Farmer Producer Organizations (FPOs) on livelihood of farmers in Meghalaya. Indian Journal of Extension Education, 59(3): 43-47
- Shivanjali, P. and Jahanara 2024. A study on the knowledge and attitude of the farmers about FPO in empowering the farmers through crop production. International Journal of Agriculture Extension and Social Development, 7(8): 50-53
- Talukdar, U. and Vatta, K. 2015. Economic and financial efficiency of Farmers' Producer Organizations: A case study of FAPRO in Hosiarpur district of Punjab. Economic Affairs, 60(3): 439-444

Aishwarya Dere , Babita Kumar and Rakesh Rathore. 2026. Perceived effectiveness of FPOs in socio-economic upliftment of member farmers in Maharashtra. The Journal of Research ANGRAU, 54(2): 97-107