

## International Journal of Agriculture Extension and Social Development

Volume 7; Issue 6; June 2024; Page No. 276-282

Received: 03-04-2024  
Accepted: 08-05-2024

Indexed Journal  
Peer Reviewed Journal

### Performance analysis of farmer producer organisations of Uttarakhand

<sup>1</sup>Dr. Sandeep Kaur and <sup>2</sup>VLV Kameswari

<sup>1</sup>Research Associate, NAHEP- Indian Council of Agricultural Research, New Delhi, India

<sup>2</sup>Professor and Head, Department of Agricultural Communication, G.B.P.U.A&T., Pantnagar, Uttarakhand, India

DOI: <https://doi.org/10.33545/26180723.2024.v7.i6d.709>

Corresponding Author: Dr. Sandeep Kaur

#### Abstract

Small and marginal farmers face many challenges in agricultural production and agricultural marketing. One of the effective and efficient ways of addressing these challenges is bringing them together as group by forming Farmer Producer Company (FPC). Farmer Producers Company reduces the cost of production by providing various services and inputs, establishing market linkages and enhancing income via collective bargaining. Considering this, a study was undertaken to analyse the performance of eight FPOs in Uttarakhand. The findings revealed that four FPOs were performing very well with a score of >75 and were ready for credit linkages. One FPO was in the range of 60-75 per cent and required capacity building for credit linkage. It was also found that two FPOs were in Grade C, with score ranging from 50-60 and require capacity building. Laksar Agro FPC was the only FPC in Grade D with a score of <50 and needed detailed assessment for further capacity building.

**Keywords:** Small and marginal farmers, farmer producer organisations, farmer producer companies, producer groups, rural development, performance

#### Introduction

Agriculture in India is predominantly production oriented and plays a pivotal role in the Indian economy as it contributes 15.87 percent of GDP. It provides employment to around 53 percent of the Indian work force, contributes to overall growth of the economy and reduces poverty by providing employment and food security to majority of the population. Further, it is spread over a large number of small and fragmented holdings. As per estimates, about 1.5 to 2.0 million new marginal and small farms are being added every year in the country due to continued land fragmentation (NAC Draft Document 2012-13 by the Working Group). Small and marginal farmers in India are vulnerable to risks associated with the sector. There are several organisational prototypes that have emerged to integrate small and marginal farmers into the value chain and enhancing their income and reducing transaction costs. One such alternative is the Farmer Producer Organization (FPO). Farmer Producer Organization (FPO) can help farmers in successfully dealing with a range of challenges that small producers face (Salokhe, 2016) [9]. FPOs are emerging as a structure, which is indispensable in the development arena of agriculture and rural development programmes (Venkattakumar *et al.*, 2019) [13]. Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India has identified Farmer Producer Organisation registered under the special provisions of the Companies Act, 1956, as the most appropriate institutional form to mobilize farmers and build their capacity to collectively leverage their production and marketing strengths. Producer Organisations can help farmers improve

their productivity and profitability by strengthening their bargaining position in the supply chain, by better responding to changing consumer preferences (environment, food quality) or by reducing the transaction costs of inputs and increasing market access (Cook and Plunkett, 2006 and Alho, 2015) [3, 1]. Producer organizations, in general, are found to be well positioned through innovative approaches to transform market arrangements in favour of marginal and small farmers. The studies indicate that the performance of the company depends on various factors such as the member-shareholders, total net profit, annual turnover (Chauhan, 2015 and Yadav *et al.*, 2018) [4, 14], the role of professionals and office bearers, participation in general body meetings, heterogeneity in membership (Vedasri, 2018) [11], organizing training programs, business planning, market linkages and convergence of government schemes for financial help. Experience and exposure to the changing trends in agriculture has also influenced the performance of the Farmer Producer Organization's (Kavin and Divya, 2019) [7]. The studies also showed that the significant factors affecting the performance were the number of FPOs promoting institutions in the area, ease of doing business, number of markets, KCC per operational holding and rural literacy (Manaswi *et al.*, 2018) [8]. In light of this, various efforts are being made by the government to promote FPOs for the well-being of small and marginal farmers. In spite of the government's vision and efforts, it has been observed that, at many places, producer companies are struggling to survive. Hence, a study was conducted to analyze the performance of the Farmer Producer Organisations of Uttarakhand.

## Methodology

For the study, two districts from Uttarakhand state viz. Haridwar district from Garhwal region and Pithoragarh district from Kumaon region were selected randomly. Census method was used and all the four FPOs from Haridwar (Jivamrit Organic Farmer Producer Company, Bhuanrit Farmer Producer Company, Agrarian Farmer Producer Company and Laksar Agro Farmer Producer Company) and of Pithoragarh district (Pithoragarh Bheej Utpadak Nidhi Swayatt Sahkarita, Sugandh Uttrapath Kisan Swayatt Sahkarita, Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi) were selected for the study. Simple random sampling method was used to select individual respondents. From each FPO, five office bearers, ten member farmers and ten non member farmers were selected. The data was collected using structured and semi-structured interview schedules and the FPO records.

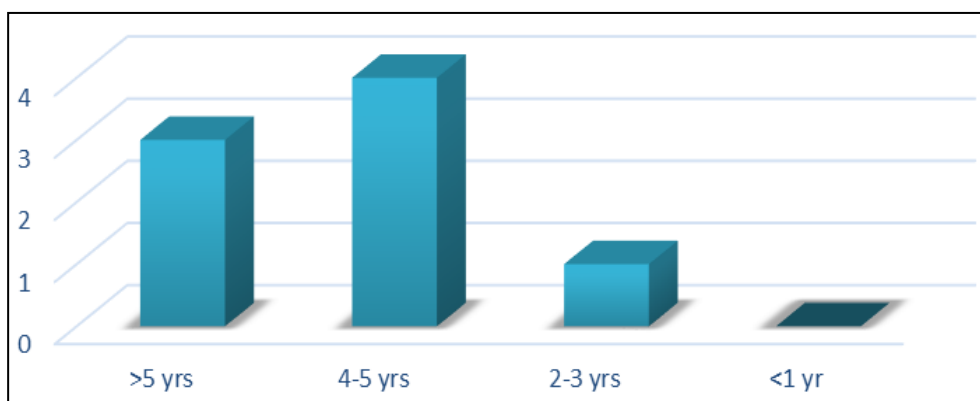
The performance of FPOs was measured using the Performance Grading Tool developed by the National Bank for Agriculture And Rural Development (NABARD). Table 1 summarizes the status of all eight FPOs across these parameters and gives the final score of all the FPOs. The Performance Grading tool developed by NABARD comprises of 15 parameters. For each parameter, scores were given according to the set standards and the score of each FPO was obtained after summing up the scores of all the given 15 parameters. On the basis of total score, the FPOs were categorized into four categories i.e. A, B, C and D as depicted in Table 1.

## Results and Discussion

**Performance of FPOs across each parameter has been discussed below**

### 1. Age profile of FPO

It refers to the number of years elapsed since the date of registration of the FPO. The FPOs were divided into four categories based on age i.e. more than 5 years, 4-5 years, 2-3 years and less than 1 year (Figure 1). Three FPOs had been working for more than 5 years (Agrarian Farmer Producer Company, Pithoragarh Bheej Utpadak Nidhi Swayatt Sahkarita and Sugandh Uttrapath Kisan Swayatt Sahkarita), four FPOs were found to be in the category of 4-5 years and one FPO i.e. Bhuanrit Farmer Producer Company was in 2-3 year category. However, it was observed that the number of years for which the FPO had been registered was not a reflection of its performance.



**Fig 1:** Age profile of FPOs

Some FPOs like Laksar Agro Farmer Producer Company, Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi were not well performing well even though they had been operating for 4-5 years. On the other hand, given proper management and direction even new FPOs (like Bhuanrit Farmer Producer Company) were successful in achieving their goals.

## 2. Governance

Governance is the non financial determinant of performance and viability of Producer Organizations (Dey, 2018) [5]. Governance of the FPOs was assessed using four sub parameters.

- **Composition of the Board:** This aspect pertained to the extent of bias in the selection of board members and reference to presence of blood relations, representation to women, experience/ professional qualification of board members and representatives of farmers' association. It was found that, all the eight FPOs had unbiased Board of Directors and all the criteria were taken into consideration during board formation.
- **Extent of strategic support:** This was mainly concerned with the support received by the FPOs from the promoters or promoting organization. It was found that three FPOs (Bheej Utpadak Nidhi Swayatt Sahkarita, Bhuanrit Farmer Producer Company and Sugandh Uttrapath Kisan Swayatt Sahkarita) received support from their promoters in form of assistance in developing business plans, assessing production and marketing, etc. and the rest did not receive any support from the promoters.
- **Regular conduct of board meetings and quorum:** Board meetings of all the FPOs were conducted regularly and in addition, special meetings were held when ever required. Annual general body meetings (AGMs) were conducted once a year, mostly after annual audit and accounts (Badatya *et al*, 2018) [2].
- **Quality of agenda and decisions/ decision making:** The quality of agenda and decision making process was found to be satisfactory in all the FPOs as they all were involved in and were able to take a decision for the welfare of the company, except Laksaragro Farmer Producer Company. In this case, the BODs and the CEO of the company were not able to come to a consensus on how to run the business.

### 3. Management: Management of the FPO was studied under three aspects

- **Availability of CEO:** As per rules, the CEO of the company has to be other than a member and accountable to both BODs and members. It was found that four FPOs had full time professional CEO (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company, Agrarian Farmer Producer Company and Sugandh Sahkarita), one FPO (Bheej Utpadak Nidhi Swayatt Sahkarita) had part time professional CEO and the rest (Laksaragro Farmer Producer Company, Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Maiya Swayatt Sahkarita Birthi) did not have a professional, full time CEO as they lacked the funds to provide salary to CEO.
- **Availability of paid staff:** It was seen that four of the eight FPOs (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company, Agrarian Farmer Producer Company and Bheej Utpadak Nidhi Swayatt Sahkarita) had paid staff and the rest four could not afford to recruit paid staff due to lack of working capital. The FPOs without paid staff were Sugandh Uttrapath Kisan Swayatt Sahkarita, Nanda Mayya Swayatt Sahkarita Birthi, Laksar Agro Farmer Producer Company and Jai Chamu Baba Nidhi Swayatt Sahkarita. In case of Sugandh Uttrapath Kisan Swayatt Sahkarita, the CEO managed all the activities, whereas in the other three, BODs were looking after the FPO activities.
- **Training/ experience of staff:** This aspect was measured under two categories i.e. training received by CEO and staff and training received by only CEO or staff. It was found that in case of four FPOs, either the CEO or the staff had received training These were Sugandh Uttrapath Kisan Swayatt Sahkarita, Nanda Mayya Swayatt Sahkarita Birthi, Laksar Agro Farmer Producer Company and Jai Chamu Baba Nidhi Swayatt Sahkarita. In the rest four (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company, Agrarian Farmer Producer Company and Bheej Utpadak Nidhi Swayatt Sahkarita), both the CEO and the staff had been trained.

### 4. Infrastructure

It was found that all the FPOs had separate fully furnished office premises. Four FPOs; viz: Jivamrit Organic Farmer Producer Company, Pithoragarh Beej Utpadak Nidhi Swayatt Sahkarita and Laksar Agro Farmer Producer Company had their own office premises and the remaining FPOs had rented office buildings for running their business. Basic infrastructure, furniture and equipments were provided to all the FPOs by the Producer Organisation Promoting Institution (POPI) during the initial phase. The only exception was Jivamrit Organic Farmer Producer Company, which arranged these on its own.

### 5. Membership of FPO

The membership of the FPOs was studied under six categories. The categories were below 50, between 50-100, between 101-200, between 201-500, between 501-1000 and more than 1000. All the FPOs had members in the category range of 201-500, exception Laksar Agro Farmer Producer

Company, whose membership was in the range of 101-200. The membership was less in case of Laksar Agro Farmer Producer Company because it was not active and did not have a business plan to attract the farmers. In case of Jivamrit organic FPC, it was observed that the membership was already about 500, but more farmers wanted to join the FPC. However, they could not be given membership as the upper limit for organic farmers group is restricted to 500. Studies indicate that large heterogeneous groups/ FPOs perform better (Vedasri, 2018) <sup>[11]</sup>. This may explain the success of Jivamrit Organic Farmer Producer Company and Bhuamrit Farmer Producer Company.

### 6. Percentage of total members contributing to share capital

In order to join the FPO, the members can only pay the registration fee and it is not necessary to purchase shares. This parameter was divided into five categories based on the percentage of members who had contributed to the share capital i.e. less than 50%, more than 50%, more than 60%, more than 70% and more than 90%. It was found that not all the members had contributed to the share capital of the FPOs at the time of formation. It was seen in case of two FPOs (Agrarian Farmer Producer Company and Laksar Agro Farmer Producer Company) that less than 50% members contributed to the share capital. In Jai Chamu Baba Nidhi Swayatt Sahkarita, more than 60% of the members and in Sugandh Uttrapath Kisan Swayatt Sahkarita, more than 70% of the members contributed to the share capital of the FPO. It was found that in case of four FPOs (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company, Pithoragarh Bheej Utpadak Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi), more than 90% members had contributed to the share capital.

### 7. Total share capital collected

According to the FPO grading tool the share capital collected is divided into three categories i.e. less than three lakhs, 3-5 lakhs and more than Five lakhs. It was found that five FPOs (Agrarian Farmer Producer Company, Laksar Agro Farmer Producer Company, Pithoragarh Bheej Utpadak Nidhi Swayatt Sahkarita, Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi) had collected less than Three lakhs as the share capital and the remaining three FPOs (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company and Sugandh Uttrapath Kisan Swayatt Sahkarita) had total share capital of >5 lakhs (Figure 2).

### 8. Training of board members

Training of the board members improves the performance of the FPO (Sawairam, 2016). It was found that in case four FPOs (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company, Agrarian Farmer Producer Company and Sugandh Uttrapath Kisan Swayatt Sahkarita) all the board members had received training. In Sugandh Uttrapath Kisan Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi, more than 80% board members were trained. Further, more than 70% of Laksar Agro Farmer Producer Company and more than 50% of Jai Chamu Baba Nidhi Swayatt Sahkarita board members have

received training.

### 9. Business plan

It was found that in case of five FPOs (Jivamrit Organic Farmer Producer Company, Laksaragro Farmer Producer Company, Jai Chamu Baba Nidhi Swayatt Sahkarita, Sugandh Uttrapath Kisan Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi) the business plan including financial plan was prepared for one year. In case of remaining three FPOs, the business plan was made for three years and this plan was further divided into annual plans and then sub divided into monthly targets.

### 10. Financial aspects

It was found that all the FPOs (except Jivamrit Organic Farmer Producer Company) received financial assistance from the Producer Organisation Promoting Institution (POPI). Jivamrit Organic Farmer Producer Company neither received nor applied for grant or financial support from NABARD, as it was financially robust since the beginning. Some of the FPOs that had received financial assistance in the initial stages were still expecting further financial help from the POPIs. Jai Chamu Baba Nidhi Swayatt Sahkarita, Nanda Mayya Swayatt Sahkarita Birthi and Laksar Agro Farmer Producer Company had scaled down their business to a great extent as the financial assistance from POPI through NABARD has come to an end. However, they are still waiting for funds from NABARD to revive their activities. It has been reported that dependence on POPIs leads to low performing FPOs (Singh, 2016) <sup>[10]</sup>.

### 11. Annual turnover

The annual turnover of the FPOs was divided into four categories i.e. less than Rs. 10 lakhs, Rs. 10-24 lakhs, Rs. 25-49 lakhs and above Rs. 50 lakhs. It was found that the turnover of two FPOs (Jivamrit Organic Farmer Producer Company and Bhuamrit Farmer Producer Company) was above Rs. 50 lakhs (Figure 3). Agrarian Farmer Producer Company had an annual turnover in the range of Rs. 25-49 lakhs and Beej Utpadak FPO in range of Rs. 10-24 lakhs. Turnover of four FPOs (Sugandh Uttrapath Kisan Swayatt Sahkarita, Laksar Agro Farmer Producer Company, Nanda Mayya Swayatt Sahkarita Birthi and Jai Chamu Baba Nidhi Swayatt Sahkarita) was less than ten lakhs. Earlier studies also indicated that more than 50% of the FPOs have turnover in the range of one lakh to 50 lakh. The highest turnover of Rs. 3.5 crores was reported in case of Jivamrit Organic Farmer Producer Company. This was partly due to well established processing units and strong market linkages. The least annual turnover i.e. Rs. 1,12,000/- was in case of Nanda Mayya Swayatt Sahkarita as there were no ongoing business activities.

### 12. Market linkage

It was found that five FPOs (Agrarian Farmer Producer Company, Laksaragro Farmer Producer Company, Pithoragarh Bheej Utpadak Nidhi Swayatt Sahkarita, Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi) were dependent on local markets for sale of their products and were not able to create assured market linkages with companies or big processors. Jivamrit Organic Farmer Producer Company, Bhumrit Farmer

Producer Company and Sugandh Uttrapath Kisan Swayatt Sahkarita had well established market linkages with corporate buyers, processors and they even used various online platforms for sale of their products.

### 13. Percentage of members availing services

The FPO provides its members with a wide range of services such as input supply, advisory services, custom hiring services, trainings, exposure visits, etc. It was found that in case of five FPOs (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company, Pithoragarh Beej Utpadak Nidhi Swayatt Sahkarita, Agrarian Farmer Producer Company and Sugandh Uttrapath Kisan Swayatt Sahkarita), over 75 percent of the members had utilized the services provided by the FPO. It was also seen that all the five FPOs supplied inputs to the members at a price lower than the market price by procuring inputs in bulk. The members were satisfied with the quality of inputs, rate and other services being provided to them by the FPO. In case of Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi, over 25 percent of the members were availing the services provided by FPO, whereas in case of Laksar Agro Farmer Producer Company, their number was less than 10 percent, as the FPC was not active and provided no services to its members. Similar findings were reported by Venkattakumar *et al.* (2019) <sup>[13]</sup> and Yadav *et al.* (2018) <sup>[14]</sup>.

### 14. Convergence with government schemes/ other agencies

It was observed that five FPOs (Jivamrit Organic Farmer Producer Company, Laksar Agro Farmer Producer Company, Sugandh Uttrapath Kisan Swayatt Sahkarita, Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita Birthi) had no convergence with any government scheme or corporate houses. Two FPOs i.e. Agrarian Farmer Producer Company and Pithoragarh Bheej Utpadak Nidhi Swayatt Sahkarita were receiving support from the government. Agrarian Farmer Producer Company received funding for its projects and entrepreneurial activities from the government and Pithoragarh Beej Utpadak Nidhi Swayatt Sahkarita had direct links with the government for getting the subsidy amount from sale of farm machinery to the farmers. The only FPO which has achieved SFAC equity support and convergence with government or other agencies was Bhuamrit Farmer Producer Company. It received SFAC equity support because the equity contribution of their shareholder members in the FPC was equal to the grant equivalent amount to be received and it had a business plan and budget for next 18 months.

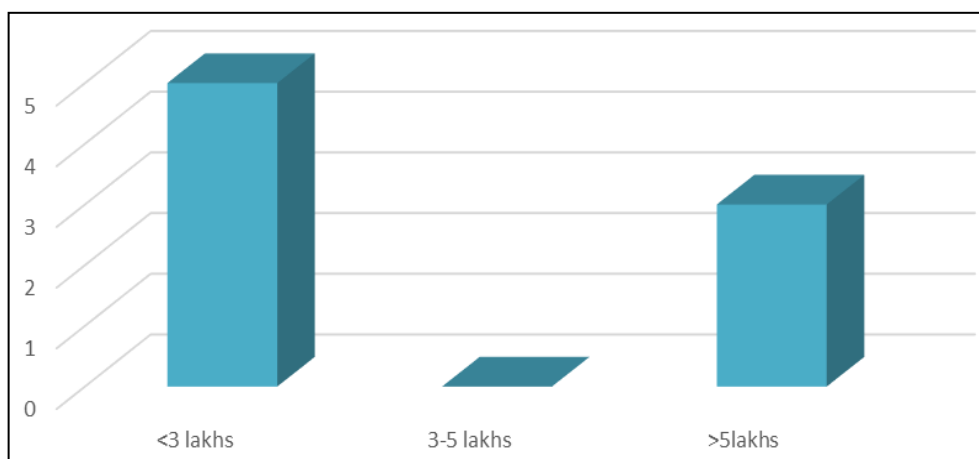
### 15. MIS/Compliance/ record keeping

The performance of the FPO also depends on robust record keeping and transparency in its activities (Venkatesan *et al.*, 2017) <sup>[12]</sup>. It was found that six FPOs (Jivamrit Organic Farmer Producer Company, Bhuamrit Farmer Producer Company, Laksar Agro Farmer Producer Company, Agrarian Farmer Producer Company, Pithoragarh Bheej Utpadak Nidhi Swayatt Sahkarita and Sugandh Uttrapath Kisan Swayatt Sahkarita) regularly submitted audited balance sheets and complied with other legal requirements.

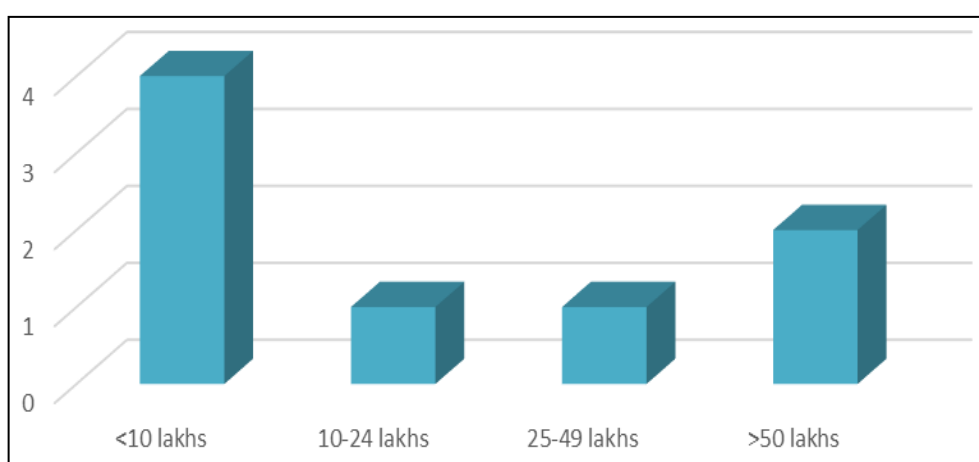


Two FPOs i.e. Nanda Mayya Swayatt Sahkarita Birthi and Jai Chamu Baba Nidhi Swayatt Sahkarita only submitted audited balance sheets. Documents and books were

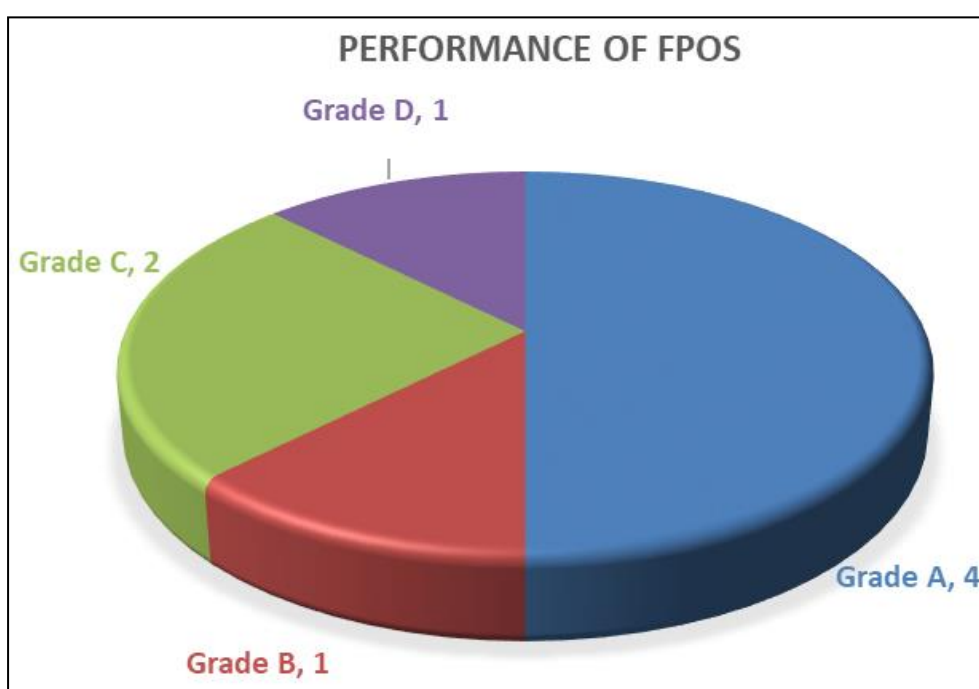
maintained up-to-date by all the FPOs, except Laksar Agro Farmer Producer Company.



**Fig 2:** Share capital of FPOs



**Fig 3:** Annual Turnover of FPOs



**Fig 4:** Performance of FPOs

Scores were assigned under each head as per the categories given in the Performance Grading Tool. The FPOs were categorised into four grades i.e. A, B, C and D (Table 1, Figure 4)) based on the total score obtained. The final score revealed that four FPOs were in Grade A, which indicates that their performance was very good and they were ready for credit linkages. Based on the total score, Bhuamrit Farmer Producer Company was the best performing FPO, followed by Jivamrit Organic Farmer Producer Company, Pithoragarh Beej Utpadak Nidhi Swayatt Sahkarita and

Agrarian Farmer Producer Company. Sugandh Uttrapath Kisan Swayatt Sahkarita was in Grade B and required capacity building prior to credit linkage. It was found that two FPOs; viz: Jai Chamu Baba Jai Chamu Baba Nidhi Swayatt Sahkarita and Nanda Mayya Swayatt Sahkarita were in Grade C with a score ranging between 50%-60%. These two FPOs require capacity building. Lastly, Laksar Agro Farmer Producer Company, with a score of less than 50%, was in Grade D. This indicates that it requires detailed assessment and intensive capacity building.

**Table 1:** Score of Performance of FPOs

Parameters/ FPO marks	Score	Jivamrit organic Farmer Producer Company	Bhuamrit Farmer Producer Company	Agrarian Farmer Producer Company	Laksar-agro Farmer Producer Company	Pithoragarh bheej Utpadak Nidhi Swayatt Sahkarita	Jai Chamu Baba Nidhi Swayatt Sahkarita	Sugandh Uttrapath Kisan Swayatt Sahkarita	Nanda Mayya Swayatt Sahkarita
Age	5	4	3	5	4	5	4	5	4
Governance	10	8	10	8	6	10	7	8	8
Management	10	10	10	10	4	9	4	6	4
Infrastructure	5	5	5	5	5	5	5	5	5
Membership of FPO	10	6	6	6	4	6	6	6	6
% of members contributing to share capital	5	5	5	1	1	5	3	4	5
Total share capital	5	5	5	1	1	1	1	5	1
Training of board members	10	10	10	10	6	10	4	8	8
Business plan	4	2	4	4	2	4	2	2	2
Financial aspects	2	0	2	2	2	2	2	2	2
Turn over	10	10	10	8	3	5	3	3	3
Market linkages	4	4	3	2	2	2	2	4	2
% of members availing services	10	10	10	10	0	10	5	10	5
Convergence with Govt. Schemes/Corporate etc.	5	0	5	3	0	3	0	0	0
MIS/ Compliance/ record keeping	5	5	5	5	3	4	4	5	4
TOTAL	100	84	93	80	43	81	52	73	59
GRADE		A	A	A	D	A	C	B	C
Remarks		Ready for credit linkage	Ready for credit linkage	Ready for credit linkage	Need detailed assessment for further capacity building	Ready for credit linkage	Need further capacity building	Credit linkage after little capacity building	Need further capacity building

## Conclusion

FPO's are proven pathway for farmers to increase investment in agriculture, improve their bargaining power, move up the value chain and improve access to technology, markets, leading to greater income generation through teamwork and cooperation. Various efforts and initiatives are being put forward by government to promote FPO's, inspite of this, it has been observed that, at many places producer companies are struggling with low performance. It can be concluded that performance of the FPO's can be enhanced by training the FPO's on developing better market linkages, creating cropping belts, developing the business sense by selecting activity portfolio, focusing on attracting financial assistance and gaining policy support from the government and developing storage and processing facilities. Other measures include extension activities specifically aimed at members of FPOs, increasing awareness about the role of FPOs in enhancing the income of farming community, and developing entrepreneurship training modules for FPOs.

## References

1. Alho E. Farmers' self-reported value of cooperative membership. Evidence from heterogeneous business and organization structures. *Agric Food Econ.* 2015;3(1):1-22.
2. Badatya KC, Ananthi S, Sethi Y. An exploratory study on Farmer Producer Organisations in Maharashtra. Reserve Bank of India, Pune; c2018. p. 1-74. Available from: [https://cab.rbi.org.in/docs/Special\\_Study/An%20Exploratory%20Study%20on%20Farmer%20Producer%20Organizations\(FPOs\)%20in%20Maharashtra.pdf](https://cab.rbi.org.in/docs/Special_Study/An%20Exploratory%20Study%20on%20Farmer%20Producer%20Organizations(FPOs)%20in%20Maharashtra.pdf). Accessed on 15 October 2020.
3. Cook ML, Plunkett B. Collective entrepreneurship: an emerging phenomenon in producer-owned organizations. *J Agric Appl Econ.* 2006;38(2):421-428.
4. Chauhan S. Producer Companies in Madhya Pradesh: An Evaluative Study. *Int J Recent Res Aspects.* 2015;2(3):66-77.
5. Dey K. Farmer Producer Companies in India:

- Determinants of Performance and Viability. *Econ Political Wkly.* 2018;53(35):44-52.
6. Joshi SK, Choudhary VK. Performance of Farmer Producer Organisations (FPOs) in Different Regions of Chhattisgarh State: A Case Study. *Indian J Agric Econ.* 2018;73(3):399-406.
  7. Kavin A, Divya K. Performance of farmer producer organization based on socio-economic factors in western region of Tamil Nadu. *Int J Chem Stud.* 2019;7(3):4434-4437.
  8. Manaswi BH, Kumar P, Prakash P, Anbukkani P, Kar A, Jha GK, Rao DUM. Progress and Performance of States in Promotion of Farmer Producer Organisations in India. *Indian J Ext Educ.* 2018;54(2):108-113.
  9. Salokhe S. Farmers producer organization for effective linkage of small producers with market. *Int J Appl Res.* 2016;2(10):142-146.
  10. Singh S. Smallholder organization through Farmer Producer Companies for modern markets: Experiences of Sri Lanka and India. In: Bijman J, Muradian R, Schuurman J, editors. *Cooperatives, Economic Democratization and Rural Development.* Cheltenham, UK & Northampton, US: Edward Elgar; c2016. p. 75-99.
  11. Veda Sri R. A study on Performance of Farmer Producer Organizations in Krishna district of Andhra Pradesh. Thesis, M.Sc. Acharya N.G. Ranga Agricultural University, Bapatla; 2018. 125p.
  12. Venkatesan P, Venkattakumar R, Sonattaki BS. Farmer Producer Company: A path-breaking grass root institutional innovation. Policy Brief by ICAR-National Academy of Agricultural Research Management; c2017. p. 36.
  13. Venkattakumar R, Mysore S, Venugopalan R, Balakrishnan B, Narayaswamy B, Atheequlla GA, *et al.* Performance of Farmers Producers Organizations (FPOs) and Associated Factors in Karnataka: Producers' Perspectives. *Indian Res J Ext Educ.* 2019;19(2 and 3):7-12.
  14. Yadav S, Joshi SK, Gauraha AK. Management status of Farmer Producer Organisations of Chhattisgarh plains. *J Pharmacogn Phytochem.* 2018;7(3):3288-3290.