

Original Research Article

Experiences of Millet FPOs with ICAR-IIMR Millet Model

ABSTRACT

Aims: In India agriculture is the primary livelihood for small & marginal farmers and they are facing various challenges throughout the agricultural value chain from seed to delivering the final produce to consumer plate. To improve the fragmented supply chain and to support small & marginal farmers government has taken an initiative of Farmer Producer Organizations (FPOs). FPOs are an important component of the government's efforts to support farmers and to address the challenges they face in the agricultural sector. FPOs also create a platform for peer learning, building social capital, and fostering a sense of community among millet farmers

Study design: Action type of research design.

Place and Duration of Study: ICAR-IIMR, Hyderabad during 2022.

Methodology: ICAR-IIMR is acting as CBBO to 41 millet FPOs in four states of which, Six FPOs distributed in Telangana (3) and Karnataka (3) were selected randomly for the present study which were implemented by NABARD, SFAC, NCDL and WDD. Action research design was used for collecting the data from millet farmers with the help of interview schedule. Problems faced by the FPOs in particular and farmers in general were analyzed in this study.

Results: ICAR-IIMR developed business models to its FPOs based on the regional context and with available resources. The success of FPOs requires assessing multiple factors and considering both quantitative and qualitative indicators. The experiences shared by millet FPOs will positively influence millet farming communities and contribute to the growth of millet cultivation. Establishing reliable market linkages, primary processing units and promoting value addition are crucial for the success of millet FPOs.

Conclusion: From the study it could be concluded that models and practices of successful FPOs may be replicated or scaled up in other regions, contributing to the broader promotion of millet farming and the formation of additional millet FPOs.

Keywords: [Supply chain, FPOs, Millet farming, Primary processing unit, Market linkages]

1. INTRODUCTION

Agriculture is the primary livelihood for majority of small and marginal farmers in India. They face numerous challenges throughout the agricultural value chain from seed to delivering the produce to final consumer plate (Baruah et al., 2022). These challenges include market identification, connectivity, outreach, fair pricing, storage limitations, high transportation costs, the presence of intermediaries, and limited access to credit (Bishnoi & Kumari 2020). To address these constraints, the Government of India has implemented various programs, schemes, and measures to support farmers (Kumar et al 2023). These initiatives include announcing Minimum Support Prices to ensure fair prices for certain agricultural commodities, establishing open auction centres, launching e-NAM (National Agriculture Market) for digitizing the marketing process, and providing subsidized inputs for agriculture. However, despite these efforts, farmers still struggle to receive remunerative prices for their produce due to the prevalence of excessive intermediaries in the existing supply

chain (Ramappa & Yashashwini 2018). To improve the fragmented supply chain, the government must continue supporting farmers through new policies and programs. One such initiative was the Farmer Producer Organizations (FPOs) program, which focuses on supporting small and marginal farmers at various stages of agricultural production. FPOs assist farmers in procuring inputs, facilitating finance, networking their produce, ensuring processing and quality control, establishing market linkages, and providing training and technical advice. By adopting a collective approach, FPOs aim to improve farmers' bargaining power and enhance their access to financial and non-financial inputs, services, technologies, and high-value markets (Sangappa et al 2023). FPOs also enable farmers to enter into partnerships with both public and private entities. Furthermore, FPOs enjoy legal provisions that allow the sharing of profits earned by the company through dividends, ensuring equitable distribution among the members (Mukherjee 2018). FPOs act as a collective voice, representing the interests of farmers and advocating for policies and programs that benefit the millet farming community (Singh et al 2021). FPOs promote cooperation, collaboration, and knowledge-sharing among farmers (Raju & Kumara 2017). FPOs also create a platform for peer learning, building social capital, and fostering a sense of community among millet farmers. This support network boosts the morale and confidence of farmers, encouraging more individuals to adopt millet cultivation (Joshi & Choudhary 2018). Overall, FPOs are an important component of the government's efforts to support farmers and address the challenges they face in the agricultural sector (Sah et al 2021). These organizations play a vital role in empowering farmers, improving their market access, and enhancing their overall socio-economic well-being. In this connection, a study was conducted to share the experiences of millet FPOs promoted by ICAR-IIMR in Telangana and Karnataka states.

2. METHODOLOGY

ICAR-IIMR is acting as CBBO to 41 millet FPOs in four states of which, Six FPOs distributed in Telangana (3) and Karnataka (3) were selected randomly for the present study which were implemented by NABARD, SFAC, NCDC and WDD. Action research design was used for collecting the data from millet farmers with the help of interview schedule. The study was undertaken during 2022. Figure-1 depicts the supply chain of millets and how the millet FPOs can safeguard the farmers from selling their produce at low price without post-harvest handling and undertaking processing and value addition of millets. The FPO will play multiple roles in enhancing the income of the farmers through proper networking with stakeholders at right time. Problems faced by the FPOs in particular and farmers in general were analysed in this study. The proper plans to resolve them were formulated and were executed in a phase wise for obtaining anticipated results.

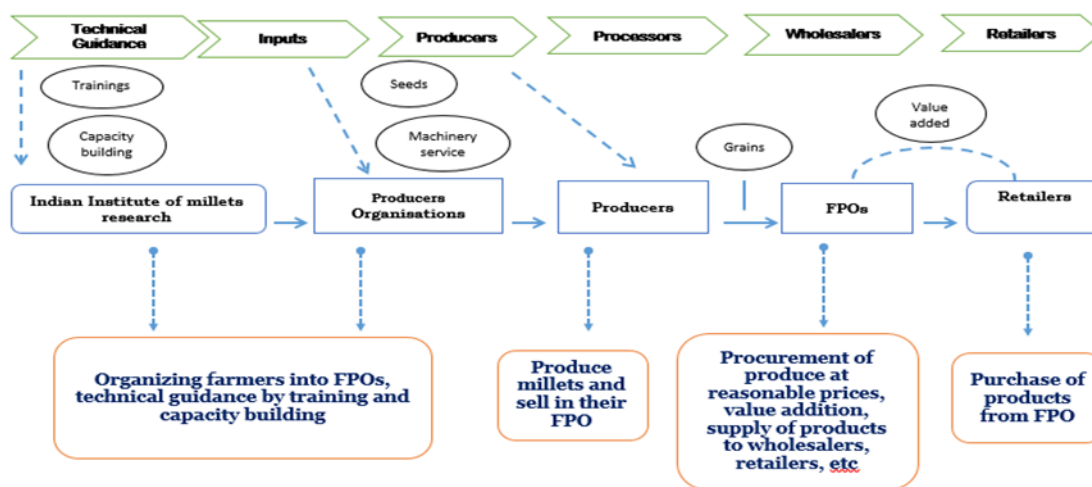


Figure 1: Supply chain of millets and FPOs

3. RESULTS AND DISCUSSION

3.1 List of ICAR-IIMR promoted FPOs

41 FPOs formed and promoted by ICAR-IIMR in four states viz., Karnataka (9 WDD and 14 SFAC), Telangana (5 NABARD, 2 NCDC and 1 SFAC), Andhra Pradesh (7 NABARD and 2 SFAC) and one SFAC FPO from Dindori district of Madhya Pradesh as shown in Table 1.

Table 1: FPOs handholded by ICAR-IIMR

Sl. No.	State	Implementing Agency	FPOs (Numbers)
1.	Karnataka	WDD	09
		SFAC	14
2.	Telangana	NABARD	05
		NCDC	02
		SFAC	01
3.	Andhra Pradesh	SFAC	02
		NABARD	07
4.	Madhya Pradesh	SFAC	01
Total			41

3.2 Experiences and benefits through Millet FPOs

Millet Farmer Producer Organizations (FPOs) plays crucial role in increasing the participation of millet farmers and promoting millet cultivation. The overall experiences and benefits associated with ICAR-IIMR promoted millet FPOs are shown in Figure 2.



Figure 2: Experiences and benefits through Millet FPOs

Millet FPOs often organize training programs, workshops, and demonstrations to educate farmers about modern farming techniques, best practices, and the benefits of millet cultivation. These initiatives help improve farmers' knowledge and skills, leading to increased productivity and profitability. These FPOs also provide access to high-quality millet seeds, fertilizers, pesticides, and other farm inputs at reasonable price. Identification of market, lack of value addition and primary processing of millets are some major challenges facing by the millet farmer (Panigrahy et al 2020). Through these millet FPOs all the millet growers are aggregated at one juncture (millet FPO) for establishing better market linkages with bulk buyers, processors, and retailers for creating direct market with farmers. These linkages eliminate intermediaries, ensures fair prices for farmers and reduce post-harvest losses through collective bargaining. This accessibility encourages more farmers to engage in millet cultivation (Virendra et al 2022).

3.3 ICAR-IIMR Millet Model for FPOs

ICAR-IIMR millet model helps in linking millet FPOs to various stakeholders and provides services like farm input centres, loan and credit systems, Custom Hiring Centres (CHC), Millets Aggregation, storage and warehouse, processing and value addition of millets and finally linking the FPO to better market, which is accessible, provide the farmers with better

price for their produce as shown in Figure 3. As these are the primary requirements to have complete cycle of seed to produce for the consumers. Apart from these activities, ICAR-IIMR has been involved in facilitating advisory role, providing inputs like seeds, aggregation of produce, processing of produce, storage, and distribution of produce with better market linkages between the members of FPOs, food industries and other organizations.

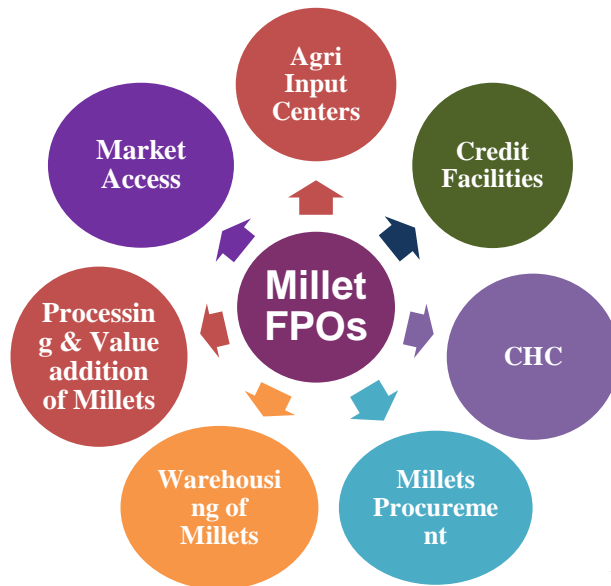


Figure 3: ICAR-IIMR Millet Model for FPOs

3.4 Success of FPO Millets Model developed by ICAR-IIMR

Table-2 represents the profile details of selected FPOs promoted by ICAR-IIMR under various implementing agencies. Among the selected FPOs, Tekmal Mandal FPCS have received Rs. 12.28 lakhs of equity grant followed by Aland Bhootai FPCL (Rs. 10.82 Lakhs), Yeldurthy Mandal FPCS (10.12 Lakhs), Koppal FPCL (9.5 Lakhs) Hulsuru FPO (6.24 lakhs), and Balanagar FPO (6.14 lakhs). The equity amount has enabled FPOs to undertake innovative business activities. It was also noticed that, after receiving the equity grant, FPOs have begun input and output businesses and had a business turnover of above Rs. 25 Lakhs individually.

ICAR-IIMR developed business models to its FPOs based on the regional context with available resources (Figure 4) and this forms the basis for the success of Millets FPOs. Hulsoor FPCL and Aland FPCL distributed millets seeds, established primary processing units of millets, delivered advisory services and provided marketing facilities to the members of FPO. Hulsoor FPO has started Customer Hiring Centre (CHC) with the assistance of Agriculture Department Govt. of Karnataka. Through this CHC the FPO provides required equipment's like rotavators, power sprayers, cultivators, MB ploughs and seed drills to its members at lower rate on rental basis. These two FPOs were appreciated by Shri. P.M. Narendra Modi in *Maan Ki Bhaat* for their efforts in promotion of millets during this IYOM-2023. Tekmal Mandal FPCS started paddy procurement centre with the technical guidance of ICAR-IIMR and through this procurement centre 7000 farmers were benefitted and have generated a profit of 31 lakhs. It's important to note that measuring the success of FPOs requires assessing multiple factors and considering both quantitative and qualitative indicators. Additionally, success may not be uniform across all FPOs, as local context, available resources, commitment of members & stakeholders and the effectiveness of FPO management can significantly influence outcomes. However, the experiences shared by millet FPOs will positively influence millet farming communities and contribute to the growth of millet cultivation.

Table-2: Profile details of Selected FPOs

Sl. No.	Name of FPO	Agency	No. of Share-holders	Equity (in Lakhs)	Crops cultivated	Type of business operated	Business turnover during 2022-23 (in Rs.)	Area of acreage targeted
1.	Hulsoor Mahila Kisan Millets Producer Company	SFAC	312	6.24	Millets	Input business, output business and value addition of millets	39.5 lakhs	4000
2.	Koppal Millets FPCL	WDD	455	9.5	Millets	Millets, Pulse trading, oil processing and sales	32.47 lakhs	3000
3.	Aland Bhootai Millets FPCL	SFAC	541	10.82	Millets and Pulses	Input business, CHCs output business and value addition of millets	37.5	4500
4.	Yeldurthy Mandal FPCS	NCDC	506	10.12	Major Millets and Paddy	Agri-input business and CHCs	28 lakhs	5000
5.	Balanagar Farmer Producer Company Limited	NABARD	307	6.14	Mangoes, Paddy and Major millets	Mango selling, Seeds, Cattle feed and Fertilizer	33 lakhs	5000
6.	Tekmal Mandal Farmers Producer Cooperative Society	NCDC	307	12.28	Paddy, Cotton, Sugarcane, Millets	Fertilizer and Seeds, Paddy Procurement center	42 lakhs	4500

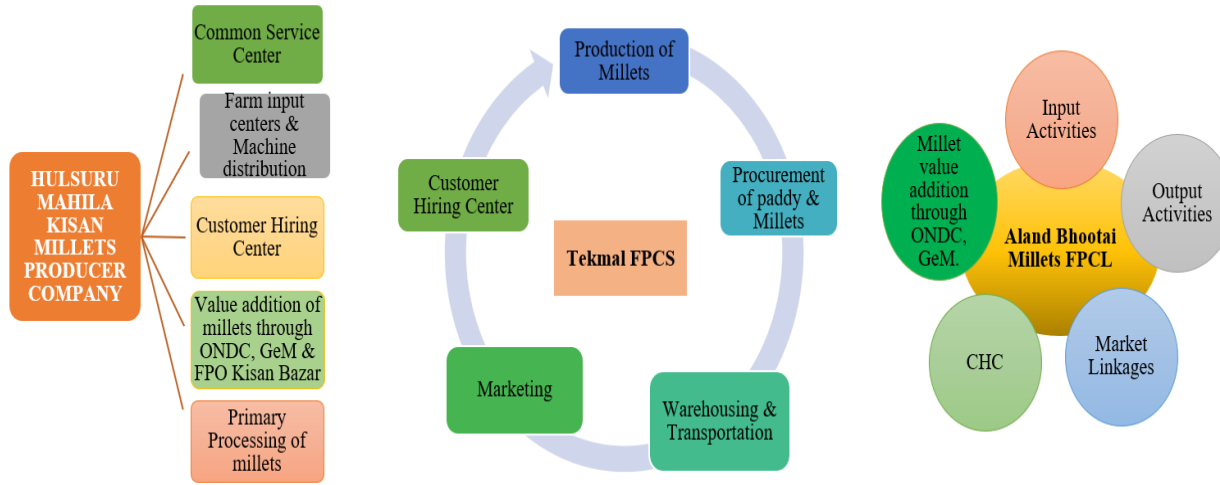


Figure:4 Business Models of Successful FPOs promoted by ICAR-IIMR

UNDER PEER

4. CONCLUSION

The success of millet Farmer Producer Organizations (FPOs) can be measured in various ways, including increased millet cultivation, improved livelihoods of farmers, enhanced market access, and sustainability of the FPOs themselves. Successful FPOs contribute to the overall development and well-being of millet farming communities as they foster social cohesion, empower farmers, and provide platforms for collective action and learning. Establishing reliable market linkages, primary processing units and promoting value addition are crucial for the success of millet FPOs as seen in Aland and Hulsoor FPCL. It could be concluded that the models and practices of successful FPOs may be replicated or scaled up in other regions, contributing to the broader promotion of millet farming and the formation of additional millet FPOs.

REFERENCES

- Baruah, S., Mohanty, S., and Rola, A. C. (2022). Small Farmers Large Field (SFLF): a synchronized collective action model for improving the livelihood of small farmers in India. *Food Security*, 14(2), 323-336
- Bishnoi, R., and Kumari, S. (2020). Challenges Faced by FPOs & Strategies to Overcome: A Review. *International Journal of Advances in Agricultural Science and Technology (IJAASST)*, 7(6), 25-33.
- Kumar, S., Kumar, R., Meena, P. C., & Kumar, A. (2023). Determinants of Performance and Constraints faced by Farmer Producer Organizations (FPOs) in India. *Indian Journal of Extension Education*, 59(2), 1–5. <https://epubs.icar.org.in/index.php/IJEE/article/view/133420>
- Mukherjee. (2018). A technical paper on Road map and strategies for effective viable profit making farmer producer companies. *Journal of Management*, 2(1), 181-189.
- Ramappa and Yashashwini, 2018. Evolution of Farmer Producer Organizations: Challenges and Opportunities. *Research Journal of Agricultural Sciences*, 9(4): pp-709-715.
- Raju and Kumara, 2017. Linking Farmers with Market through FPOs: Challenges and Opportunities. Doubling Farmers' Income: *KISAN-MITRAA*: 15–16 March 2017, Vivekananda International Foundation (VIF), No: 3, San Martin Marg, Chanakyapuri, New Delhi – 110021.
- Sangappa, Dudekula, R., B.Laxmi, E. Charishma, & K Srinivasa Babu. (2023). Strengthening Millet Value Chain through Farmer Producer Organizations. *Indian Journal of Extension Education*, 59(3), 26–31. Retrieved from <https://epubs.icar.org.in/index.php/IJEE/article/view/136293>
- Sah, U., Dixit, G. P., Kumar, H., Ojha, J., Katiyar, M., Singh, V., Dubey, S. K., & Singh, N. P. (2021). Performance of Millets in Bundelkhand Region of UP State. *Indian Journal of Extension Education*, 57(4), 120–125. Retrieved from <https://epubs.icar.org.in/index.php/IJEE/article/view/115528>
- Singh, M., Tiwari, D., Monga, S., & Rana, R. K. (2021). Behavioural Determinants of Functionality of Farmer Producer Organisations in Punjab. *Indian Journal of Extension Education*, 58(1), 130–135. Retrieved from <https://epubs.icar.org.in/index.php/IJEE/article/view/1>
- Virendra Rathour, P. K. Tiwari, & P. K. Pandey, K. P. Singh, D. P. Singh. (2022). Socio-Economic Upliftment of Tribal Women through FPO in Bastar District of Chhattisgarh. *Indian Journal of Extension Education*, 58(4), 144–148. Retrieved from <https://epubs.icar.org.in/index.php/IJEE/article/view/128455>
- Joshi, S. K., & Choudhary, V. K. (2018). Performance of Farmer Producer Organizations (FPOs) in Different Regions of Chhattisgarh State: A Case Study. *Indian Journal of Agricultural Economics*, 73(3), 399-406.
- Panigrahy, B. P., Nath, S. C., & Padhi, P. K. (2020). Activities, marketing strategies and brand performance of FPOs'in Odisha-the Eastern state of India. *International Journal of Management*, 11(10), 11-17.