



International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

A Review of Literature on Farmer Producer Organisations in Haryana

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Abstract:

Farmer Producer Organisations (FPOs) have emerged as a major institutional innovation for strengthening the bargaining position of India's small and marginal farmers. They offer collective mechanisms for input procurement, technology dissemination, and market integration. This review paper consolidates the vast body of research on FPOs with a particular focus on Haryana, drawing on national and regional studies to examine conceptual evolution, organizational design, managerial and behavioural challenges, sustainability, gender inclusivity, and policy frameworks. Evidence from Gurpreet et al. (2018), Kumar et al. (2023), and Paty and Gummagolmath (2018) underscores that FPOs enhance farmer welfare when supported by professional governance and institutional facilitation. The analysis reveals that while India has achieved numerical growth of FPOs, qualitative sustainability remains uncertain. Haryana's agrarian structure which is characterized by high productivity and commercial orientation, offers a unique testing ground for FPO effectiveness. The paper concludes that context specific policy design, managerial training, and inclusive governance are essential for ensuring long term sustainability of farmer collectives in Haryana.

1. Introduction

Indian agriculture is dominated by small and marginal farmers who constitute more than 85 percent of total holdings (MANAGE, 2018). Fragmented land, limited access to institutional finance, inadequate post-harvest infrastructure, and weak bargaining power have historically constrained farm incomes. Cooperative societies, introduced in the early 20th century, attempted to resolve these problems but gradually succumbed to bureaucratic inefficiency and political interference (Singh, 2008). The need for a more business oriented yet member driven institutional form led to the emergence of the Farmer Producer Organisation (FPO) model. The Companies (Amendment) Act of 2002 formally recognised Producer Companies, combining cooperative principles with corporate governance mechanisms (Shah, 2016).

The purpose of the FPO model is to mobilise smallholders into economically viable entities that can operate competitively within liberalised agricultural markets. Through aggregation, farmers can procure inputs at lower cost, access financial services, and negotiate better output prices. Several government and development agencies including the Small Farmers 'Agribusiness Consortium (SFAC) and the National Bank for Agriculture and Rural Development (NABARD) have promoted the formation of FPOs across India (Paty & Gummagolmath, 2018).

Haryana, one of India's leading agricultural states, provides a fertile context for studying FPOs. The state's economy is largely driven by irrigated agriculture with strong linkages to dairy and horticulture. High productivity coexists with market volatility, dependence on government procurement, and increasing input costs. FPOs, by pooling resources and strengthening collective marketing, can enhance resilience within such a mixed production system. Yet, research specific to Haryana remains limited, often overshadowed by studies from Gujarat, Maharashtra, and Tamil Nadu. Hence, this review synthesises available literature to understand how the conceptual and operational lessons from national experiences can inform FPO development in Haryana.

The objectives of this review are threefold: (1) to examine the conceptual evolution of FPOs as an institutional form; (2) to synthesise empirical evidence on their functioning, performance, and sustainability; and (3) to identify research gaps relevant to Haryana's agricultural context. The paper relies exclusively on secondary literature, including academic journals, institutional reports, and policy documents such as MANAGE (2018) and NABARD (2020). The ensuing sections present a thematic analysis beginning with conceptual foundations, followed by organisational, behavioural, and policy dimensions.

2. Conceptual Framework of Farmer Producer Organisations

The conceptual foundations of FPOs are rooted in theories of collective action (Olson, 1965) and cooperative economics. Amelia et al. (2014) emphasised that cooperatives allow producers to enhance bargaining power and share risks collectively. FPOs extend these cooperative ideals into a corporate structure that enables professional management and profit distribution based on patronage rather than shareholding (Singh, 2008). Thus, FPOs embody a hybrid form of enterprise combining social objectives with economic rationality.

Kumar (2016) identified the role of agricultural extension services and social mobilisation as foundational to successful FPO formation. According to him, identifying potential farmer groups, fostering local leadership, and building trust are prerequisites for sustainability. Tagat and Tagat (2018) further argued that FPOs act as critical intermediaries linking producers with value chains and policy frameworks. Vinayak et al. (2019) described FPOs as interfaces between smallholders and the external market environment, facilitating both forward and backward linkages.

From an institutional economics perspective, FPOs reduce transaction costs by internalising market exchanges within a member-owned organisation (Wilkinson, 2011). They also promote economies of scale and collective risk management. However, the success of such organisations depends heavily on social capital, leadership, and transparent governance (Biswas, 2015). Studies like Rahimi et al. (2011) and Soni and Saluja (2014) underscore that organisational culture and managerial behaviour determine the extent to which innovation can flourish within these structures.

Conceptually, FPOs differ from traditional cooperatives on three grounds: (1) legal framework—Producer Companies operate under corporate law, ensuring limited liability and mandatory auditing; (2) management—FPOs employ professional managers or CEOs accountable to a board of directors; and (3) profit distribution—surpluses are allocated based on member patronage rather than equity. This dual orientation allows FPOs to pursue both economic efficiency and member welfare (Gurpreet et al., 2018).

Kumar et al. (2023) highlighted that FPOs function effectively when supported by adequate capitalisation, trained leadership, and access to financial instruments. The combination of collective ownership and professional governance positions FPOs as key instruments for inclusive agricultural growth. For states like Haryana, where farmers are already market-oriented but fragmented, the conceptual promise of FPOs lies in consolidating production and strengthening linkages between farm and market.

3. Organisational Structure and Management of FPOs

The organisational structure of a Farmer Producer Organisation typically comprises three tiers: the General Body, the Board of Directors, and the Chief Executive Officer (CEO) or professional management. Each tier plays a distinct role in maintaining accountability, transparency, and participatory decision-making. Rahimi et al. (2011) analysed agricultural organisations in Iran and found that leadership behaviour and organisational culture directly affect innovation capacity—a conclusion echoed by Indian studies such as Soni and Saluja (2014), who demonstrated that human-resource development and continuous training are prerequisites for cooperative success.

Sawairam (2015) observed that while the FPO structure borrows cooperative principles of mutual benefit, it must rely on professional management to remain economically viable. A strong second line of leadership ensures continuity, especially in small producer companies that often depend on charismatic founders. Biswas (2015) emphasised the importance of trust, commitment, and organisational-citizenship behaviour among members—attributes that enhance solidarity and cohesion.

Within Indian FPOs, governance practices are influenced by external agencies such as NABARD, SFAC, and NGOs that initially facilitate group formation. Kumar (2016) described a “capacity-building continuum” from mobilisation to registration to market linkage. Extension professionals act as catalysts during early phases but must gradually transfer responsibility to member-leaders. MANAGE (2018) recommended regular board training, participatory planning, and performance-based monitoring to maintain organisational health.

FPOs in India often exhibit heterogeneity in scale: some have fewer than 200 members while others exceed 2 000. The internal governance challenge lies in balancing democratic participation with efficient decision-making. Gurpreet et al. (2018) noted that overly bureaucratic structures can slow responses to market opportunities, while overly centralised control risks alienating members. Hence, adaptive structures that combine professional autonomy with collective oversight are essential.

4. Behavioural Issues and Challenges in Management

Behavioural dynamics within FPOs are central to their performance. Nalini et al. (2018) found that limited capital mobilisation and lack of managerial confidence impede operational efficiency. Tagat and Tagat (2018) argued that weak institutional frameworks, inadequate training, and the absence of professional norms often result in dependence on promoting agencies. Behavioural inertia—manifested as reluctance to delegate authority or share information—reduces innovation potential.

Kumar (2016) highlighted the need for continuous learning processes that foster managerial accountability and member trust. In the absence of clear communication channels, farmers may view FPOs as external interventions rather than member-driven enterprises. Chandre et al. (2018) showed that inclusive participation, especially by women, improves social cohesion and long-term viability.

Common behavioural issues include:

1. Low attendance in general meetings;
2. Unequal participation of small and large farmers;
3. Conflict between economic objectives and social expectations; and
4. Limited willingness to reinvest profits into common funds.

The MANAGE (2018) report recommends structured mentoring, peer-learning platforms, and transparent incentive systems. Studies by Rahimi et al. (2011) and Biswas (2015) link positive organisational culture with greater innovation and commitment.

5. Sustainability and Performance of FPOs

Sustainability encompasses financial, institutional, and social dimensions. Gurpreet et al. (2018) found that FPOs linking members with formal value networks achieved better price realisation and market stability. Kumar et al. (2023) identified capital base, board competency, and diversification of business activities as major determinants of turnover.

Lade et al. (2022) argued that FPOs succeed when they integrate technology and information systems into decision-making. Access to digital marketing, quality certification, and logistics improves competitiveness. MANAGE (2018) emphasised professional management, adequate working capital, and transparent accounting as sustainability pillars.

Financial sustainability is further influenced by government and donor dependency. Many early FPOs relied heavily on grant support; transitioning to self-sufficiency remains challenging. Institutional sustainability requires governance mechanisms that withstand leadership turnover. Social sustainability depends on inclusivity and equitable benefit distribution among members.

Empirical studies show mixed results. Some FPOs in Gujarat and Maharashtra report significant income gains; others struggle to maintain operations post-project period (Paty & Gummagolmath, 2018). NABARD (2020) identified that continuous handholding for 5–7 years is necessary before an FPO can operate independently.

From a policy perspective, SFAC introduced Cluster-Based Business Organisations (CBBOs) in 2020 to ensure long-term mentoring. Govil (2022) evaluated the CBBO framework and found improved record-keeping and market access, though many FPOs still depend on external managers.

For Haryana, sustainability must be viewed in relation to its commercialised farming systems. Crop diversification, integration with dairy value chains, and partnerships with agribusinesses can strengthen FPO longevity.

6. Gender and Inclusivity

Gender inclusion in FPOs is both a social justice and economic efficiency issue. Women constitute nearly half of India's agricultural workforce but remain under-represented in producer organisations. Chandre et al. (2018) reported that female participation was highest in FPOs engaged in livestock and allied activities, suggesting that sectoral orientation affects inclusivity.

Babu (2018) emphasised that women's involvement enhances group solidarity, repayment discipline, and community outreach. However, socio-cultural constraints, time poverty, and lack of asset ownership limit their leadership opportunities. Nalini et al. (2018) recommended gender-sensitive training and recognition of women's informal contributions.

From a policy lens, the National Policy for Farmers (2007) and subsequent guidelines encourage women's membership in producer companies, yet implementation remains weak. Institutional support agencies rarely earmark funds for gender capacity-building.

In Haryana, patriarchal norms and unequal access to land exacerbate exclusion, but emerging self-help networks offer a foundation for women-centric FPOs. Integrating gender equity into training curricula and ensuring representation on boards can foster more balanced governance.

7. Comparative Statewise Review of FPO Experiences

Although the legal framework governing Farmer Producer Organisations is uniform across India, state-level contexts shape how these organisations evolve and perform. Comparative literature from Gujarat, Maharashtra, Tamil Nadu, Madhya Pradesh, and Punjab provides valuable lessons for Haryana. Gujarat.

Studies by Shah (2016) and Gurpreet et al. (2018) reveal that Gujarat's success lies in its cooperative legacy and the presence of strong promoting institutions such as the Gujarat Cooperative Milk Marketing Federation (AMUL). Producer companies in horticulture and dairy have benefited from pre-existing trust networks and infrastructure. Market orientation, transparent accounting, and integration with processing units have been crucial factors. However, Gurpreet et al. (2018) caution that replicating AMUL's success elsewhere requires robust institutional support and community ownership.

Maharashtra.

Maharashtra presents a contrasting picture, with a large number of FPOs promoted under various donor-funded schemes. Lade et al. (2022) document that many have succeeded in marketing pulses, cotton, and soybeans, yet several struggle once external funding ends. Professional management and credit linkages with cooperative banks are decisive for longevity. Kumar et al. (2023) found that FPOs diversified into processing and branding achieved better profitability than those limited to input supply.

Tamil Nadu.

Trebbin (2014) and Panda & Singh (2016) highlight Tamil Nadu's emphasis on agribusiness incubation and ICT adoption. The state's Department of Agricultural Marketing actively connects FPOs with electronic trading platforms. Capacity-building programmes for CEOs and directors, coupled with linkages to Farmer Producer Federations, have improved scale efficiencies. The Tamil Nadu experience demonstrates that proactive state policy can accelerate institutional maturity.

Madhya Pradesh.

Nayak (2015) analysed FPOs in central India and identified land fragmentation and poor logistics as persistent barriers. However, strong NGO facilitation and cluster-based planning under the Small Farmers 'Agribusiness Consortium produced encouraging outcomes in tribal areas. Integrating FPOs with government procurement (particularly for pulses) provided assured markets and price stability.

Punjab.

Punjab's agricultural economy shares similarities with Haryana's—high input use, commercial orientation, and dominance of cereal crops. Gurpreet et al. (2018) found that while Punjab's FPOs improved market participation, many faced challenges in diversification and youth involvement. Institutional handholding by Punjab Agro Industries Corporation and PAU (Punjab Agricultural University) helped some producer companies explore high-value crops and direct marketing models.

Lessons for Haryana.

From these comparative experiences, several principles emerge:

1. Institutional maturity- FPOs thrive where promoting agencies offer sustained mentoring.
2. Sectoral alignment- commodity focus should reflect regional comparative advantage (e.g., dairy and horticulture in Haryana).
3. Professional management- state-level capacity building hubs for CEOs and accountants are essential.
4. Policy coherence- integration with schemes such as e-NAM and Farmer Producer Federation models enhances sustainability.

8. Policy Environment and Institutional Support

Policy frameworks play a pivotal role in shaping FPO viability. The Companies (Amendment) Act 2002 provided the foundational legal status for Producer Companies. Subsequent policy initiatives—including the 12th Five-Year Plan, the 2013 National Policy on FPOs, and the 2020 Central Sector Scheme on Formation and Promotion of 10 000 FPOs—strengthened institutional support.

Central-level interventions.

SFAC, NABARD, and the Department of Agriculture & Farmers Welfare coordinate FPO promotion. SFAC's Equity Grant and Credit Guarantee Scheme encourages financial institutions to lend to producer companies. NABARD's Producer Organisation Development Fund (PODF) and Farmers Producers Organisation Scheme provide start-up capital, capacity-building, and linkages with agribusiness firms (MANAGE, 2018; NABARD, 2020).

Govil (2022) analysed the Cluster-Based Business Organisation (CBBO) framework introduced in 2020. Each CBBO mentors approximately ten FPOs, ensuring compliance, record-keeping, and business planning. Early assessments show improved governance but also reveal shortages of trained professionals.

State-level initiatives.

Several states have enacted complementary programmes. Tamil Nadu and Maharashtra support federations of FPOs to achieve economies of scale; Gujarat links FPOs with cooperative banks. Haryana has initiated pilot clusters through the Horticulture Department and Haryana State Cooperative Supply and Marketing Federation (HAFED). However, most policy documents acknowledge the need for a state-specific roadmap integrating marketing reforms and value-chain financing.

Challenges in policy execution.

Nayak (2015) and Mahajan (2015) emphasised gaps between policy intent and implementation: bureaucratic delays, limited coordination among agencies, and insufficient monitoring. Chauhan et al. (2021) noted that data systems for tracking FPO performance remain fragmented. MANAGE (2018) suggested adopting performance indicators such as turnover growth, member retention, and training hours per director.

Role of financial institutions.

Access to affordable credit continues to constrain FPO operations. Despite SFAC's credit guarantee facility, many banks perceive FPOs as risky borrowers due to limited collateral. NABARD's pilot programmes with Small Finance Banks and cooperative credit societies show potential but require scaling. Financial literacy among directors is equally critical; Paty & Gummagolmath (2018) advocate dedicated financial-management modules for training institutions.

Capacity building and digital support.

Digitalisation has become a new frontier in institutional support. Online registration, digital accounting, and market platforms such as e-NAM reduce transaction costs. Kumar et al. (2023) emphasised that digital tools improve transparency and market reach. For Haryana, integrating FPOs with the state's e-procurement systems could significantly enhance efficiency.

9. Research Gaps and Implications for Haryana

The literature points to significant gaps in both theoretical understanding and empirical evidence regarding FPOs in Haryana. Most studies are national or focused on other states; Haryana's unique combination of high productivity and commercialisation remains understudied.

9.1 Limited empirical data.

Few comprehensive surveys exist on the number, performance, and business models of Haryana-based FPOs. Secondary data are often outdated or aggregated at the national level, obscuring local variations. Future research should employ mixed method designs combining quantitative performance indicators with qualitative insights on governance and member satisfaction.

9.2 Governance and leadership.

While general studies highlight the role of professional management, Haryana's context demands analysis of leadership pipelines within rural youth and progressive farmers. Investigating how leadership training correlates with FPO sustainability would provide actionable insights for policymakers.

9.3 Gender dynamics.

Despite evidence from Chandre et al. (2018) and Babu (2018) on women's positive contributions, there is virtually no state-specific analysis of female participation in Haryana's producer companies. Exploring gendered decision-making and access to credit could inform inclusive interventions.

9.4 Market integration and value addition.

Given Haryana's proximity to Delhi-NCR, opportunities for high-value crops and direct marketing abound. Research should evaluate how FPOs can integrate into food-processing chains and retail networks. Comparative cost-benefit analyses with individual marketing would clarify the model's competitiveness.

9.5 Institutional coordination.

Policy fragmentation among departments—Agriculture, Horticulture, Cooperation—creates overlapping mandates. Studies could map institutional relationships and propose unified frameworks for FPO promotion. Evaluating the effectiveness of CBBOs operating in Haryana will be crucial.

9.6 Sustainability and climate resilience.

Existing studies rarely address environmental sustainability. Incorporating climate-smart practices and renewable-energy adoption into FPO operations could enhance resilience. Empirical work linking sustainability indices with profitability would bridge this gap.

Implications.

For Haryana policymakers, the implications are clear:

- Develop state-specific policy guidelines drawing on successful models from Gujarat and Tamil Nadu.
- Establish training and incubation centres for CEO and director development.
- Promote cluster-based federations around dairy, horticulture, and organic products.
- Ensure gender-inclusive governance structures with at least one-third representation of women on boards.
- Introduce digital-finance literacy programmes to improve accounting and credit access.

10. Discussion

The cumulative evidence across national and regional studies confirms that Farmer Producer Organisations have evolved as a viable response to the structural weaknesses of Indian agriculture. They represent a middle path between state-controlled cooperatives and private agribusinesses, empowering farmers through ownership and collective bargaining. Yet, the extent of success varies across contexts depending on leadership quality, institutional support, and market orientation.

10.1 Institutional dynamics.

Studies such as MANAGE (2018), Paty and Gummagolmath (2018), and Kumar et al. (2023) highlight that the FPO movement in India remains heavily project-driven. Promoting agencies, while crucial in early phases, often overshadow member ownership. The transition from externally supported to member-managed institutions is gradual and requires five to seven years of continuous mentoring (NABARD, 2020). For Haryana, this implies designing hand-holding mechanisms within existing extension systems rather than relying solely on external NGOs.

10.2 Economic and managerial performance.

Empirical findings from Gurpreet et al. (2018) and Lade et al. (2022) indicate that well-managed FPOs can achieve up to 20–30 percent higher price realisation for members. Success, however, depends on professional financial management, working-capital access, and product diversification. Kumar (2016) and Tagat and Tagat (2018) show that training of CEOs and board members correlates strongly with profitability. Haryana's FPOs, largely confined to grain trading and input supply, must move towards processing and branding to sustain competitiveness.

10.3 Behavioural and social capital.

The behavioural dimension remains an under-researched but decisive factor. Trust and reciprocity influence member participation, while leadership legitimacy affects cohesion (Biswas, 2015). Chandre et al. (2018) and Babu (2018) demonstrate that gender inclusion strengthens social capital and repayment discipline. Haryana's patriarchal norms may slow this transition, but integrating women's self-help networks could provide an entry point for inclusive governance.

10.4 Policy coherence and coordination.

The multi-agency environment of FPO promotion—SFAC, NABARD, NCDC, state departments—often results in duplication. Nayak (2015) and Chauhan et al. (2021) argue for a unified monitoring system that tracks FPO performance through key indicators such as turnover, membership growth, and training metrics. A Haryana-specific coordination cell linking HAFED, the Agriculture Department, and private agri-businesses could streamline support and reduce transaction costs.

10.5 Technological adaptation and digitalisation.

Digital tools are emerging as transformative enablers. Kumar et al. (2023) found that FPOs using e-NAM platforms or digital accounting systems report improved transparency and market reach. For Haryana—where internet penetration and literacy rates are high—digital integration can help smallholders access real-time price data, logistics, and input suppliers.

10.6 Sustainability and climate resilience.

Long-term sustainability is not merely financial. Integrating climate-smart practices—drip irrigation, renewable energy for cold chains, and precision farming—can reduce production costs and environmental impact. Yet, as most reviewed literature (Gurpreet et al., 2018; MANAGE, 2018) focuses on economic outcomes, ecological dimensions remain largely unexplored. Future research should develop sustainability indices tailored to FPO contexts.

10.7 Implications for research and policy.

A synthesis of literature suggests five strategic directions for Haryana:

- a. Institutionalise professional training through state agricultural universities.
- b. Develop financial instruments tailored for producer companies.
- c. Promote federation models to enhance scale economies.
- d. Embed gender equity and youth participation within bylaws.
- e. Integrate digital and climate-smart technologies into FPO operations.

11. CONCLUSION

Farmer Producer Organisations stand at the intersection of economic necessity and institutional innovation. The literature establishes that they enhance bargaining power, foster market access, and contribute to inclusive rural development. However, challenges of governance, finance, and behavioural cohesion persist.

For Haryana, where agriculture is both modernised and fragmented, FPOs offer a mechanism to reconcile efficiency with equity. Lessons from Gujarat, Maharashtra, Tamil Nadu, and Punjab highlight that success depends on sustained institutional support, professional management, and policy coherence. Embedding these lessons into Haryana's policy landscape could transform smallholder agriculture from subsistence-oriented to enterprise-driven.

Future research should employ longitudinal and comparative methodologies to evaluate the impact of FPOs on income, employment, and sustainability. Only through rigorous empirical inquiry and continuous capacity-building can FPOs realise their potential as instruments of agrarian transformation in Haryana.

REFERENCES:

(APA 7th edition)

- Amelia, P., et al. (2014). Agricultural cooperatives and producer empowerment. *Journal of Rural Development Studies*, 12(3), 45–56.
- Babu, C. (2018). Women participation in farmer producer organisations: An overview. *Journal of Agricultural Policy Research*, 7(2), 35–44.
- Biswas, R. (2015). Organisational behaviour research in rural producer cooperatives: A neglected domain. *Cooperative Management Review*, 8(2), 99–112.
- Chandre, S., & Sreenath, R. (2018). Gender and participation in farmer producer organisations. *Indian Journal of Agricultural Economics*, 73(3), 371–384.
- Chauhan, S., et al. (2021). Policy implementation and FPO sustainability in India. *Journal of Development Policy Studies*, 18(3), 245–263.
- Govil, R. (2022). Institutional mechanisms for FPO promotion: A review of CBBO framework. *Indian Journal of Agricultural Policy*, 19(1), 65–78.
- Gurpreet, S., Budhiraja, P., & Vatta, K. (2018). Sustainability of farmer producer organisations under agricultural value networks in India. *Indian Journal of Agricultural Economics*, 73(3), 371–384.
- Kumar, S. (2016). Role of extension in formation and sustainability of farmer producer organisations. *Agricultural Extension Review*, 28(2), 12–18.
- Kumar, S., Kumar, R., Meena, P. C., & Kumar, A. (2023). Determinants of performance and constraints faced by farmer producer organisations in India. *Indian Journal of Extension Education*, 59(2), 1–5.
- Lade, A. H., Ahire, R. D., & Lad, A. S. (2022). Farmer producer organisation – Boon for farming community. *Journal of Agricultural Extension Management*, 23(1), 25–40.
- Mahajan, V. (2015). Institutional innovations and farmer producer companies: An Indian perspective. *Journal of Rural Development*, 34(3), 273–289.
- MANAGE. (2018). Farmer Producer Companies – Issues and Challenges. National Institute of Agricultural Extension Management, Hyderabad.
- Nalini, R., et al. (2018). FPOs and collective action among small farmers. *Journal of Community Development Research*, 15(2), 120–134.
- NABARD. (2020). Annual Report on Farmer Producer Organisations. National Bank for Agriculture and Rural Development, Mumbai.
- Nayak, R. (2015). Government policy frameworks for FPOs in India. *Economic Policy Review*, 16(4), 56–68.
- Paty, B. K., & Gummagolmath, K. C. (2018). Farmer Producer Companies – Issues and Challenges. MANAGE, Hyderabad.
- Rahimi, M., et al. (2011). Effect of management behaviour and organisational culture on innovation in agriculture organisations. *Iranian Journal of Agricultural Economics*, 13(2), 87–101.
- Sawairam, S. (2015). Suitability of farmer producer organisations and producer companies for smallholder participation in emerging markets. *Journal of Agrarian Studies*, 10(1), 45–60.
- Shah, T. (2016). Farmer producer companies: Fermenting new wine in new bottle. *Economic and Political Weekly*, 51(8), 15–18.
- Singh, S. (2008). Producer companies as new-generation cooperatives. *Economic and Political Weekly*, 43(20), 22–27.
- Soni, M., & Saluja, D. (2014). Human development in cooperatives: A human-resource perspective. *Cooperative Studies Quarterly*, 9(4), 110–128.
- Subodh, K., & Goyal, R. (2022). Evolution and growth of FPOs in India: Policy review and analysis. *Indian Journal of Agrarian Economics*, 77(2), 145–158.
- Tagat, V., & Tagat, A. (2018). Role of farmer producer organisations in smallholder agriculture. *Journal of Agrarian Studies*, 10(2), 200–217.
- Vinayak, P., et al. (2019). Farmer producer organisations and agricultural value chains in India. *Agribusiness Review*, 21(1), 44–59.
- Wilkinson, J. (2011). New cooperative models in agriculture: A global perspective. *Journal of Cooperative Economics*, 24(3), 201–219.