



New Trends in
Qualitative
Research



VOLUME 21 | N° 3

DOI:

<https://doi.org/10.36367/ntqr.21.3.2025.e1153>

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Submission date: October, 2024

Review date: March, 2025

Publication date: August, 2025

UNDERSTANDING THE INFLUENCE OF FARMER PRODUCER COMPANIES ON FARMER LIVELIHOODS: A SYSTEMATIC LITERATURE REVIEW

ABSTRACT

Farmer Producer Companies (FPCs), as a legal entity in India, combine corporate efficiency with cooperative spirit to boost farmers' negotiating power, access to market, and sustainable farming. Despite growing policy support and an increasing number of FPCs, the overall evidence on their influence on farmers' livelihoods remains fragmented across disciplines and geography. To address this gap, a systematic literature review was conducted to identify, appraise, and synthesize peer-reviewed studies with the objective of examining the influence of the FPC model on farmers' livelihoods. Following PRISMA, we identified 237 records from Scopus, PubMed, and Google Scholar; screened titles/abstracts and assessed 143 full texts for eligibility; and included 32 studies in an inductive thematic synthesis with CASP appraisal and cross-tabulations across study designs to ensure transparency and rigor. The findings were categorized and examined into three themes: economic, social well-being and issues and challenges. Findings indicate that FPCs economically benefit farmers by improving access to markets, credit, grants, government support, training, and technologies that boost yields and improve quality for better price realization. Socially, FPCs strengthen social capital via member-elected governance structures, peer mentoring, and targeted training programs, with notable gains in smallholder resilience and women's leadership. FPCs, while beneficial, also face challenges in governance and leadership, undercapitalization, and market linkages. Further study on addressing these issues is crucial for their long-term influence on farmer livelihoods. This review illustrates the value of inductive theme generation, quality-weighted analysis, and cross-tabulation methods, and recommends longitudinal and participatory research to capture evolving governance dynamics and long-term livelihood outcomes.

Keywords

Agriculture; Productivity; Farmer producer company; Livelihood; PRISMA.

1. Introduction

As the backbone of many economies, agriculture is crucial to maintaining livelihoods and guaranteeing adequate food supplies (Sajjad & Nasreen, 2016). Low-income levels, restricted access to markets, and a lack of access to resources and technical improvements are just a few of the well-documented difficulties that farmers in different parts of the world confront. Innovative techniques, such as “Farmer Producer Companies (FPCs),” have arisen as possible solutions to empower farmers and improve their livelihoods in the face of these issues (Lalitha et al., 2022). A Farmer Producer Company is a corporate entity registered under the Indian Companies Act (Sections 581A–581Z), in which smallholder farmers pool equity to jointly undertake production, procurement, marketing, and processing activities, while retaining democratic control through member-elected boards and sharing surplus via dividends (Govil et al., 2020).

Hybrids of private businesses and cooperative organizations, “farmers’ producer companies (FPCs)” have emerged in recent years in India. The idea behind producer companies is to take the best of both corporate efficiency and the cooperative spirit. In order to reap the benefits of economies of scale and reduce transaction and coordination costs, producer firms are working to include smallholders in contemporary supply networks (Lanting, 2005). Farmers own and operate these businesses, which get funding from the state or charitable organizations. Although producer businesses are becoming increasingly popular in the agricultural sector, they have received surprisingly little attention in the literature, especially outside of India (Trebbin & Hassler, 2012).

To ground our analysis, we draw on the hybrid cooperative-corporate framework articulated by Trebbin & Hassler (2012, p. 412), who describe FPCs as “new-generation cooperatives” that integrate cooperative norms of mutuality with corporate practices of efficiency and scalability. This duality suggests two complementary pathways through which FPCs influence farmer livelihoods: (a) corporate efficiency, characterized by formalized governance structures, external financing capacity, and performance monitoring mechanisms (Murray, 2008); and (b) cooperative spirit, embodied in collective decision-making, social solidarity, and member-driven resource sharing (Singh, 2008).

The Indian Companies Act operationalizes this intersection by requiring both minimum paid-up capital and democratic control clauses, thereby legally anchoring the balance between profit-oriented efficiency and member-centric cooperation (Govil et al., 2020). Against this theoretical backdrop, our review examines how FPCs manage these dual imperatives across economic, social, and institutional dimensions.

The paper aims to offer insight into the influence of FPCs on economic, social, and agricultural outcomes related to farmer livelihoods by reviewing a wide range of studies.

This literature study follows a systematic literature review methodology to gather and assess existing literature on FPCs and their effect on farmer livelihoods.

We adopted a systematic review approach to ensure a comprehensive, transparent, and reproducible synthesis of all available evidence on Farmer Producer Companies' influence on the livelihoods of farmers and to minimize selection bias in our literature analysis.

To achieve the objective of this study, which is to understand the influence of farmer-producer companies on farmer livelihoods, a set of research questions was formulated that includes:

RQ1: What are the primary economic influence of Farmer Producer Companies (FPCs) on farmer livelihoods?

RQ2: How do FPCs influence the social well-being and empowerment of farmers?

RQ3: What are the key challenges and limitations encountered by FPCs in improving farmer livelihoods?

By using a thorough and evidence-based approach, the study hopes to add to the current body of knowledge on the influence of Farmer Producer Companies on farmer livelihoods and pave the way for future studies and policy changes.

1.1 Concept of Farmer Producer Companies

Farmer Producer Companies are a group of farmer-producers who support small farmers by offering end-to-end services that essentially cover all parts of agriculture, from inputs and technical assistance to processing and selling (Pathania et al., 2020). The idea behind Farmer Producer Organizations is that farmers who produce agricultural goods can create organizations and register as companies under the Indian Companies Act. It is intended to strengthen farmers' competitiveness and advantage in new market prospects (Trebbin & Hassler, 2012).

However, FPCs differ somewhat from earlier kinds of collectives like Cooperatives; FPCs have a statutory mechanism as per the Indian law that allows them to distribute dividends to their members. Previous cooperative experiences in India have highlighted the necessity for more autonomy for cooperatives to function as commercial organizations in highly competitive marketplaces (Ramappa & Yashashwini, 2018).

Consequently, following a change to Section 581 of the Companies Act, 1956 in 2003, a novel type of cooperative known as "Producer Companies" emerged. Part IX-A of Chapter 1 of the Companies Act, 1956 (S. Singh, 2021) details the requirements for registering a producer company. Producer companies can be formed for the purpose of producing, harvesting, procuring, grading, pooling, handling, marketing, selling, exporting, or importing primary products or commodities and services for the advantage of the members (Murray, 2008). These producer businesses function within the corporate regulatory framework, which is vastly different from the cooperative system (S. Singh, 2008).

1.2 Farmer Producer Companies and Their Evolution

The institutional approach to poverty reduction, agricultural revival, and social empowerment is also regarded as a significant means by which to double farmers' incomes in the course of executing various strategies for doing so.

This article persuasively argues that collectives of the poor are far more effective than other methods of agricultural investment and output, and it does so by highlighting the successes of such groups.

It has been stated that bottom-up agricultural production collectives, in particular, provide a great deal of potential for boosting agricultural output, as well as for reducing poverty and increasing the agency of the poor (Agarwal, 2010).

FPCs have emerged as a viable solution to the problems that plague small and marginal farmers in India. To better their economic situation, farmers can band together through these groups (Raju et al., 2017). Farmers' Producer Companies (FPCs) let farmers bypass intermediaries so they may sell their goods directly to consumers at a higher price. As a result, farmers are able to increase their revenues and lessen their post-harvest losses. FPCs are essential in this regard since they offer training and extension services that encourage farmers to use more environment friendly and productive farming methods, which in turn increases both crop yields and product quality (Lalitha et al., 2022). In addition, FPCs increase overall efficiency and save operating expenses by simplifying bulk purchases, streamlining processing and coordinating promotion. To improve their bargaining position with buyers and input suppliers, small and marginal farmers might join FPCs to work as a group. As a result, they are able to sell their goods at market rates and purchase input materials at lower costs (Nadu, 2021).

FPCs help their members gain access to loans and government subsidies that they may not have otherwise gotten. The funding is used to update farming methods, purchase necessary equipment, and improve infrastructure. Recognizing that regional characteristics, managerial skills, market demand, and government assistance may all affect FPC performance which is crucial. Many FPCs have shown promise, but there are obstacles that might hinder their effectiveness (Govil et al., 2020).

The reviewed literatures as given in 'Table 1', reveals that Farmer Producer Companies (FPCs) provide a range of services to their members, including input supply, technical assistance, and market access.

While most studies highlight the role of FPCs in improving market access and output prices, some also emphasize their contributions to input supply and technical support. However, the extent of involvement in each service area varies across different FPCs and studies.

Table 1. Services offered by FPC.

Services of FPC					
Author	Input Supply	Input Prices Support	Technical	Marketing	Output Prices Support
Amitha et al. (2021)	✓	✓	✓	✓	✓
Bhadauria & Singh (2021)	✓	✓	✓	✓	✓
Challuri & Patoju (2021)	✓		✓	✓	
Govil et al. (2020)	✓	✓	✓	✓	✓
Kumar et al. (2023)	✓			✓	
Kumari & Bisht (2023)				✓	
Mukherjee et al. (2019)	✓	✓	✓	✓	✓
Murray (2008)	✓	✓	✓	✓	✓
Nadu (2021)Nadu (2021)			✓		✓
(Padmaja et al., 2019)				✓	
Pandian & Ganesan (2019)				✓	
Pathania et al. (2020)				✓	✓
Prasad (2019)	✓		✓	✓	✓
Ramappa & Yashashwini (2018)	✓		✓	✓	✓
Rosairo et al. (2012)		✓		✓	✓
Sharma (2022)	✓				✓
G. Singh & Vatta (2019)	✓	✓			✓
G. Singh et al. (2018)				✓	
S. Singh (2008)	✓			✓	
S. Singh (2021)			✓		
Stockbridge et al. (2003)	✓			✓	
Trebbin & Hassler (2012)				✓	
Trivedi et al. (2023)			✓		✓
Vijayakumar (2021)					✓

2. Objective of the Study

The objective of this study is to understand the influence of farmer-producer companies on farmer livelihoods. In order to reach the objective, this study conducts a systematic literature study of FPCs and their effect on farmers' incomes; researchers scour databases for articles, reports, and other publications written by a wide range of writers. By analyzing and synthesizing the results of several studies, this review draws attention to important themes, trends, and gaps in current literature.

3. Method

Systematic literature review entails a structured and transparent process of formulating the research question, establishing inclusion and exclusion criteria, retrieving articles from selected databases, and conducting a qualitative synthesis for enhancing the transparency, replicability, and academic rigor of reviews in interdisciplinary research in social sciences.

This systematic literature review investigates the influence of FPCs on farmers' livelihoods. The methodological approach of this systematic literature review was developed based on the *PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses)* framework (Galgaye, 2022; Mengist et al., 2020; Pimentel-Tormon et al., 2022). The study by Galgaye (2022) utilized the *PRISMA* framework to reveal and summarise the determinants affecting garlic production in Ethiopia. The methodology section is intended to offer a clear overview of the data collection process (Search), the inclusion and exclusion criteria, along with the screening and selection process (Appraisal), the coding process and systematic synthesis (Synthesis) and the data analysis method (Analysis).

To ensure transparency and rigor in the review process, a *PRISMA* flowchart has been included. This flowchart visually outlines the stages of the review process, from the initial search and selection of articles to the final inclusion of studies. This serves as a clear representation of the article selection process, enhancing the reproducibility and transparency of the review. The flowchart below depicts our review stages visually.

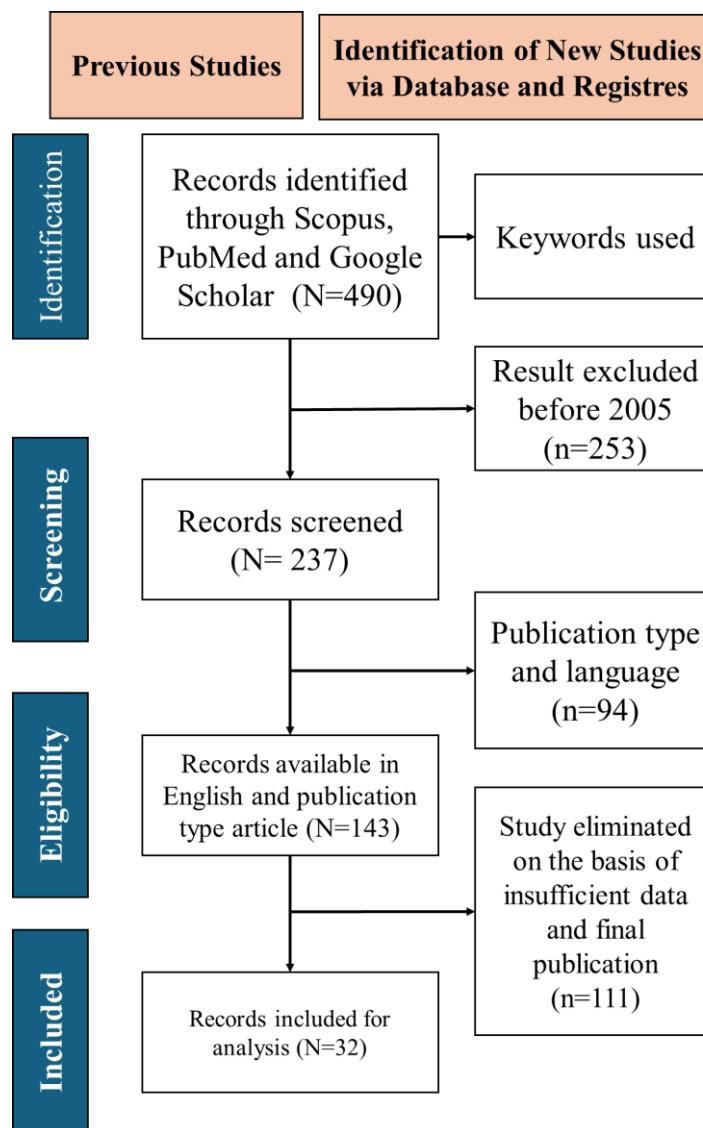


Figure 1. PRISMA flowchart.

3.1 Data Collection Process

The data for this systematic review was gathered by a thorough search of relevant studies published between 2005 and July 2023. A systematic search was undertaken across Scopus, PubMed and Google Scholar databases. These databases were selected because of their wide reach, coverage of high-quality articles, and relevance to agricultural economics and cooperatives.

The search was carried out using specific keywords such as “*farmer producer companies*,” “*agricultural cooperatives*,” “*farmer livelihoods*,” “*impact*,” “*effect*,” and “*benefits*.” These keywords were chosen to cover a broad variety of papers investigating the influence of FPCs on many elements of farmer lives, such as income, agricultural productivity, and social benefits.

The search was further narrowed by using filters to include only English-language publications, assuring the material's accessibility and comprehension. The studies were selected based on their availability, publication year, and direct relevance to the subject of FPCs. This methodical methodology guaranteed that the gathering procedure was complete and reflective of the existing body of literature.

3.2 Inclusion and Exclusion Criteria

We evaluated the study's quality using the CASP Systematic Review Checklist (Critical Appraisal Skills Programme) with certain modifications, following the application described by Khosravi et al. (2024). The inclusion and exclusion criteria were designed to ensure the selection of high-quality, relevant studies that clearly explain how FPCs influence farmers' livelihoods.

Inclusion Criteria:

Studies included in this review had to meet the following criteria:

Focus on Farmer Producer Companies (FPCs) or agricultural cooperatives: Articles must clearly cover FPCs or comparable agricultural cooperative models and their impact on farmers' lives.

Research Type: Empirical research, case studies, and systematic reviews examined the influence of FPCs on farmers' income, agricultural production, socioeconomic position, and quality of life.

Time Frame: Studies published from 2005 to July 2023 were considered to ensure that the review contains the most current and relevant results.

Language: Only articles published in English were included to ensure consistency and comprehensibility of the review findings.

Exclusion Criteria:

The following types of studies were excluded from the review:

Non-English Language Publications: Studies published in languages other than English were excluded to maintain consistency and ensure accessibility of the material.

Non-Peer-Reviewed Studies: To maintain academic rigor, unpublished reports, dissertations, and articles not subjected to peer review were excluded.

Studies without Sufficient Data: Articles that lacked sufficient data on the impact of FPCs on farmer livelihoods or those that did not directly address the effects of FPCs were excluded.

Irrelevant Focus: Studies that did not specifically analyze the impact of FPCs or that deviated from the focus of income generation, agricultural production, or overall livelihoods were excluded.

Table 2. The criterion for determining what is included and excluded.

Criterion	Inclusion	Exclusion
Publication Type	Articles	Editorials, Letters, Notes, Books, Erratum, Editorial
Thematic Areas	All thematic areas relevant to “Focus on Farmer Producer Companies (FPCs) or agricultural cooperatives”	Irrelevant Focus (e.g., FPCs or similar agricultural cooperative models that do not influence farmer livelihoods)
Geographical Scope	All countries/territories	None
Language	English	Non-English languages
Timeframe	The study considers the research from January 2005 and July 2023	Before January 2005 and after July 2023

3.3 Screening and Selection Process

The screening and selection process followed a three-layer approach to ensure the inclusion of the most relevant and high-quality studies.

Initial Screening: In the first layer, articles were chosen based on their names, keywords, and abstracts. This stage found 237 possibly relevant papers, which seemed to correspond with the study subject.

Second Screening: In the second layer, 143 articles passed to full-text review, where we applied predefined inclusion/exclusion criteria and appraised methodological quality using the adapted CASP checklist to ensure rigorous empirical focus.

The goal was to find research that looked specifically at the effect of FPCs on farmers' lives, including economic, social, and production results.

Final Inclusion: The full-text assessment excluded studies lacking sufficient data or methodological rigor, yielding 32 publications for the final thematic synthesis.

3.4 Coding Process and Systematic Synthesis

After selecting the articles, the data were examined using a qualitative theme synthesis method. This technique enabled the identification of major themes, trends, and conclusions throughout the included research.

Thematic analysis was vital for combining qualitative data from multiple research studies that differed in design, technique, and emphasis. An inductive thematic synthesis approach was employed to consolidate findings across relevant literature on Farmer Producer Companies (FPCs). The process followed a structured three-stage strategy:

- Coding of findings from qualitative studies
- Development of descriptive themes reflecting recurring patterns
- Generation of analytical constructs that map broader livelihood implications

This method aligns with established qualitative synthesis frameworks (Grant & Booth, 2009) and enables an interpretive understanding of institutional dynamics within FPCs. Studies were screened based on relevance, methodological rigor, and context specificity, ensuring robust synthesis across sectors. To ensure reliability and objectivity, the coding and thematic synthesis process was carried out by two independent researchers. Both researchers initially reviewed a sample of articles line-by-line to develop a shared coding framework, which has yielded established common thematic categories.

The three primary thematic dimensions evolved and used in the coding process were as follows:

Economic Outcomes: The effects of FPCs on farmers' income, productivity, and economic stability.

Social and Community Benefits: The role of FPCs in improving social cohesion, empowerment, and overall quality of life for farmers.

Challenges and Barriers: The difficulties faced by FPCs in achieving their intended outcomes, including financial constraints, governance issues, and market access.

Each of the 32 selected studies was independently coded and cross-tabulated against these themes by both researchers. Any differences in interpretation were resolved through discussion and mutual agreement to ensure consistency. The findings from each study were carefully categorized into these themes to provide a comprehensive understanding of the multifaceted effects of FPCs on farmer livelihoods. Given the qualitative nature of the studies, this synthesis approach was the most suitable for drawing meaningful conclusions from the diverse range of articles included in the review.

3.5 Data Analysis Method

An interpretative approach was used to analyze the synthesized data and generate insights into the role of FPCs in improving farmer livelihoods. By examining the results across different contexts, the review identifies recurring patterns and contrasts in the experiences of farmers involved in FPCs. This approach emphasized both the positive impacts, such as improved income and empowerment, and the challenges, such as governance issues and market-related barriers.

3.6 Methodological Landscape of Prior Studies on FPC

To establish our fully inductive synthesis within the existing body of work, ‘Table 4’ summarizes the methodological designs, primary limitations, and recommended enhancements for the key studies on Farmer Producer Companies.

This comparative overview highlights how past research has spanned cross-sectional surveys, econometric analyses, mixed-methods case evaluations, and conceptual syntheses, and draws attention to recurrent gaps, such as limited temporal depth, narrow geographic coverage, and under-utilization of network or longitudinal methods. By placing our inductive, CASP-weighted, manual cross-tabulation approach in this context, we both demonstrate its strengths relative to earlier designs and pinpoint concrete directions for future methodological innovation.

Table 3. Methodological characteristics and future directions.

Reference	Methodology	Key Limitation(s)	Suggestions for Methodological Improvement
G. Singh & Vatta (2019)	Cross-sectional household survey; econometric analysis of income impacts	Relies on self-reported earnings; single-point measurement prevents assessment of long-term effects	Implement a longitudinal panel design to track income changes over multiple seasons and validate through administrative data
Stockbridge et al. (2003)	Qualitative briefing paper; case examples	Limited generalizability; lacks systematic data collection	Adopt a multi-site comparative case-study protocol with standardized interview guides
Mukherjee et al. (2019)	Post-hoc evaluation combining quantitative indicators and focus groups	After-the-fact design; potential recall bias; no baseline comparison	Integrate pre-post mixed-methods design with baseline measurements and participant observation
Amitha et al. (2021)	Structured survey of FPO performance metrics	Cross-sectional; limited to one district; governance measures measured via perception scales	Expand to multi-district surveys and triangulate perceived governance with document analysis of meeting minutes
Trivedi et al. (2023)	Mixed-methods (survey + key-informant interviews)	Small qualitative sample reduces depth; limited analytical integration between strands	Increase qualitative sample size for grounded theory development; use joint display techniques for mixed-methods synthesis
Rosairo et al. (2012)	Quantitative performance analysis; shareholder survey	Focused solely on marketing firm shareholders; neglects non-member perspectives	Incorporate social network analysis to capture broader stakeholder interactions
Pandian & Ganesan (2019)	Household survey; exploratory factor analysis	Limited psychometric validation of factors; regional focus	Perform confirmatory factor analysis on larger, more diverse samples to validate constructs
Kumar et al. (2023)	Survey-based determinants analysis; regression	Static snapshot; does not account for institutional changes over time	Employ time-series or panel regression to assess how evolving policies affect FPO performance
Vijayakumar (2021)	Case-study of single FPO; document review + interviews	Single-case limits transferability; lacks quantitative outcome measures	Conduct multiple case comparisons and embed quantitative tracking of social capital metrics
Trebbin & Hassler (2012)	Conceptual analysis; literature synthesis	Primarily theoretical; no empirical validation of hybrid model	Test the proposed hybrid cooperative-corporate model through empirical survey or field experiments

4. Influence of Farmer Producer Companies on Farmer Livelihoods

In order to present a clear and systematic overview of how Farmer Producer Companies (FPCs) affect various dimensions of farmer livelihoods, we have organized 32 reviewed studies into three principal thematic domains: Economic Outcomes, Social and Community Benefits, and Challenges and Barriers. 'Table 4' synthesizes these domains by listing key sub-themes, such as input procurement, collective empowerment, and institutional constraints, and the corresponding exemplar studies for each. This mapping not only highlights the breadth of empirical evidence across different contexts but also underscores gaps and emerging areas of inquiry within each theme.

Table 4. Distribution of reviewed studies by theme, sub-theme, and representative authors.

Theme	Sub-theme	Representative Authors
Economic Outcomes	Input procurement & cost efficiency	Amitha et al. (2021); Kumar et al. (2023); Padmaja et al. (2019)
	Price negotiation & market linkages	G. Singh & Vatta (2019); Stockbridge et al. (2003); Raju et al. (2017)
	Value addition & product diversification	Challuri & Patoju (2021); Rosairo et al. (2012); Pathania et al. (2020)
	Income stability & profitability	Bhadauria & Singh (2021); Mukherjee et al. (2020); G. Singh & Vatta (2019)
	Access to credit & finance	Murray (2008); Govil et al. (2020)
Social & Community Benefits	Collective empowerment & decision-making	Lalitha et al. (2022); Trebbin & Hassler (2012)
	Knowledge sharing & capacity building	Vijayakumar (2021)
	Social capital & trust formation	Sajjad & Nasreen (2016); S. Singh (2021)
	Gender dynamics & women's leadership	Mukherjee et al. (2019); Vijayakumar (2021)
	Peer mentoring & farmer networks	Pandian & Ganesan (2019); Vijayakumar (2021)
Challenges & Barriers	Institutional constraints & policy gaps	Ramappa & Yashashwini (2018); Trivedi et al. (2023)
	Financial sustainability & liquidity issues	Murray (2008); Govil et al. (2020); Mukherjee et al. (2020); Challuri & Patoju (2021)
	Governance & leadership deficits	Singh (2008); Singh (2023)
	Logistical hurdles & supply-chain bottlenecks	Pathania et al. (2020); Padmaja et al. (2019)
	Capacity deficits & skill gaps	Kumari & Bisht (2023); Padmaja et al. (2019)

4.1 Economic Outcomes

Farmer Producer Companies drive substantial economic benefits for member farmers across multiple dimensions, as detailed below.

Input Procurement & Cost Efficiency: By pooling demand for agricultural inputs like seeds, agrochemicals and machinery, FPCs negotiate bulk discounts and eliminate intermediaries, directly reducing production costs for members. Amitha et al. (2021) report input-cost savings in Medak district through collective input procurement. Kumar et al. (2023) identify input-supply services, including procurement of seeds and agrochemicals, as a key activity of FPCs, though they do not provide exact discount figures.

Price Negotiation & Market Linkages: Farmer Producer Companies represent an enormous change for farmers operating in a wide variety of agricultural contexts. When farmers come together in the form of FPCs, it increases output and improves economic conditions. First and foremost, FPCs have simplified access to the market, cutting down the need for middlemen and directly increasing farmers' earnings. As a result of this positive feedback loop, the agricultural industry is able to generate more revenue and suffer fewer post-harvest losses with greater efficiency (Stockbridge et al., 2003). Furthermore, FPCs increase farmers' negotiating power by giving them a single voice in discussions with buyers and input suppliers, leading to lower input prices and better-quality agricultural supplies (Bhadauria & Singh, 2021). Consolidating produce under a single brand further strengthens this bargaining position. Empirical evidence from Gujarat and Andhra Pradesh confirms that collective marketing through FPCs raises farmgate prices over local spot market rates (G. Singh & Vatta, 2019; Raju et al., 2017). By linking farmers directly to processors and large retailers, FPCs not only secure price premiums but also foster more stable contracts and reliable demand forecasts, reducing income volatility for members.

Value Addition & Product Diversification: Beyond raw commodity sales, FPCs invest in grading, packaging, and processing units, adding value and capturing higher market segments. Challuri and Patoju (2021) describe Osmanabad FPCs is providing value addition services like, cleaning, drying, grading, packaging, storing and branding which is may boost net returns of produces of farmers. Rosairo et al. (2012) illustrate similar expected gains from seed-cleaning facilities in Sri Lanka, and Pathania et al. (2020) report that tomato FPCs in Punjab realized incremental price by uplifting the cold-chain packaging and quality grading.

Income Stability & Profitability: The facilitation of diverse income-generating activities by FPCs, ranging from the operations relating with livestock production and crop cultivation to wood processing and fish breeding, has significantly transformed members' livelihoods.

With the exception of piggeries, these efforts have significantly increased the wages of FPC members overall. G. Singh and Vatta (2019) highlight how FPCs unite smallholders across regions to accelerate technology adoption, boost productivity, and secure access to essential inputs and services, thereby strengthening agriculture-based livelihoods. Empirically, FPO membership is associated with an average annual income increase of Rs. 9,983 per farmer along with household reports an increase of Rs. 3,152 in consumption and Rs. 2,791 in productive asset investment. These farms were also reported likely to have lower levels of debt. Beyond diversification, FPCs stabilize and enhance profitability through collective marketing mechanisms. Bhadauria and Singh (2021) demonstrated that FPC-mediated collective marketing enhances members' bargaining power and can mitigate exposure to spot-market volatility, leading to more consistent income flows. Mukherjee et al. (2020) while assessing the benefits in a FPC of dairy sector observe significant gains in social capital (0.385), human capital (0.375), and economic capital (0.232) indices among dairy-FPC members. These outcomes indicate that FPCs are not only increasing the average earnings of farmers but also helping farmers against market fluctuations.

Access to Credit & Finance: Critically, FPCs facilitate farmers' access to institutional financing and government aid. Through structured equity-grant schemes, subsidized loans, and advocacy for sustainable methods via training and extension services, FPCs enable members to upgrade agriculture practices and tools and it improves productivity and product quality. Govil et al. (2020) describe matching equity grants of up to ₹15 lakh for FPCs with paid-up capital up to ₹30 lakh, supplemented by subsidized working-capital loans from partnered financial institutions. These funds, combined with targeted training and extension services, enable investments in storage, processing equipment, and modern agronomic tools, key drivers of productivity and quality improvements. For example, Mukherjee et al. (2019) report that a poultry-FPC used equity grants and loan funds to establish feed-mill infrastructure, leading to a 48.76 percent rise in company income and an average sustainability score of 0.87. By reducing dependence on informal, high-interest credit, FPCs empower farmers to adopt yield-enhancing innovations and better manage financial risk.

'Table 5' given below provides a summary of how FPCs are influencing the member farmers through membership in FPCs, along with relevant data-driven insights.

Table 5. Summary findings of studies on the influence of FPCs.

Author	Influence of FPCs	Quantitative Outcomes
G. Singh & Vatta (2019)	Improved technological penetration and farm productivity; enabled access to inputs and services and increased farmer incomes.	A favourable and statistically significant outcome of FPO membership is an increase in annual earnings of Rs. 9,983 for farmer members compared to those who are not members. There is an increase in expenditure of Rs. 3,152 on consumption and Rs. 2,791 on productive assets among FPO-affiliated families.
Stockbridge et al. (2003)	Improve market access, lower post-harvest losses, and increased income.	-
Bhadauria & Singh (2021)	Lower prices and better-quality agricultural supplies (inputs).	Most active FPOs have paid-up capital of less than Rs. 10 lakhs, while just 90 have more than Rs. 50 lakhs.
Govil et al. (2020)	Improved knowledge because of training and extension services.	The Equity Grant Scheme supports Farmer Producer Companies (FPCs) by providing corresponding equity grants of up to Rs . 10 lakh per FPC in two instalments to newly formed and existing FPCs with paid-up capital up to Rs . 30 lakh.
Sharma (2022)	Increased revenue of agricultural producers.	Under new criteria, FPOs would receive Rs18 lacs in the early years, an equity grant of Rs.15 lacs, and a fund to use for modest costs like critical person salary.
Trivedi et al. (2023)	Better exposure to new techniques and increased bargaining power resulted in increased income.	-
Mukherjee et al. (2019)	Human, social, and political dimensions of economic empowerment have all improved.	The MP Women Poultry Producer Company Ltd.'s income rose was 48.76%, which is good. The company's average sustainability score of 0.87 implies long-term sustainability.
Challuri & Patoju (2021)	Marketing, value-added, technology, and pre-harvest services and support.	There are 236 Farmer Producer Companies (FPCs) in the Osmanabad district, and between them, they cultivate a total of 664,608.01 hectares.
Mukherjee et al. (2020)	Increased Livelihoods Security.	The greatest shifts occurred in social capital (0.385), followed by those in human capital (0.375) and economic capital (0.232).
Singh (2023)	Boost farmer incomes.	-
Lalitha et al. (2022)	Training and extension services resulted in better quality produce and increased income.	-
Nadu (2021)	Purchase of Input goods at less cost and sell their goods at market rates.	The current annual income for Indian farmers is less than Rs. 1.0 lakh (INR 96,703 during 2015-16), but the Indian government aims to increase this to around Rs. 2.50 lakh (INR 2,19,724) by 2022-23 by focusing on value addition.

4.2 Social and Community Benefits

Successful FPCs have been able to empower underprivileged farmers and rural women, which has contributed to inclusive growth and gender parity.

In conclusion, the emergence of Farmer Producer Companies has dramatically altered the course of farmers' lives, ushering in a new era of complementary cooperation and economic agency in rural areas. The business model of FPOs was evaluated by Trivedi et al. (2023) to learn about the social and financial effects on members. The study concluded that the members of FPOs, especially small and marginal farmers, benefited socially and economically from their exposure to new techniques and increased bargaining power as a result of collectivization.

The “Madhya Pradesh Women Poultry Producer Company Pvt. Limited (MPWPCL)” was established by a group of low-income rural women, and Mukherjee et al. (2019) studied its effects. The study employed an after-the-fact methodology. The real impact of FPCs was estimated using several methods, each with its own advantages and disadvantages. It was determined that the MPWPCL was quite efficient. The poor rural women's human, social, and political dimensions of economic empowerment have all improved since they joined the FPC. Considering the potential of a high-performing Farmer Cooperative during hard economic times, Vijayakumar (2021) investigated its business strategy, effective services, and elements of empowerment using primary and secondary sources. Financial strength was demonstrated by the FPO output company thanks to its commodities emphasis, expert management and governance, and backward and forward links. These factors not only bolstered members' incomes but also fostered greater social cohesion and community resilience among participants.

4.3 Challenges and Barriers

While the influences of Farmer Producer Companies (FPCs) are widely acknowledged, several studies offer a more critical perspective on their challenges and barriers. These studies are also highlighted in Table 4 which indicates structural, managerial, and contextual limitations of FPCs.

Institutional Constraints & Policy Gaps: FPCs operate under the dual institutional mandates of the Companies Act and cooperative norms, but ambiguous regulations around dividend distribution, minimum capital requirements, and grant eligibility leave many companies in limbo. Ramappa and Yashashwini (2018) note that unclear statutory provisions hinder newly formed FPCs from accessing government equity grants on time, while Trivedi et al. (2023) highlight ambiguities in FPC regulatory provisions that complicate capital structuring and access to formal benefits. Rosairo et al. (2012) note that member-share restrictions prevent broader member engagement, undermining collective strength.

Financial Sustainability and Liquidity Issues: Limited paid-up capital and irregular cash flows are widespread. Govil et al. (2020) note that absent timely equity grants, some FPCs turn to informal lenders at onerous rates, eroding member returns. Similarly, Mukherjee et al. (2020) highlight that limited working-capital often forces FPCs to defer member payouts, undermining trust. Such capital constraints limit FPCs' ability to undertake economies-of-scale activities like bulk procurement, value addition, or technology upgrades (Govil et al., 2020).

Challuri & Patoju (2021) analyzed how farmer-producer businesses have affected small and marginal farmers and reported that FPCs routinely under-deliver on advisory and credit services, limiting their developmental potential. FPCs' limited collateral and credit histories often constrain their ability to secure bank loans, underscoring the need for targeted credit-guarantee schemes (Murray, 2008).

Governance and Leadership Deficits: Democratic governance is central to the FPC model, which comes from the cooperative spirit, but in practice, board members of FPCs often lack the training and role clarity needed for effective oversight. Singh (2008) warned that nascent FPCs suffer from decision-making suffers when board responsibilities are not well defined. Singh (2023) argues that without robust accountability frameworks and leadership continuity, FPCs risk mission drift and fail to fully leverage member capacities.

Logistical Hurdles and Supply-Chain Bottlenecks: Effective aggregation and distribution are critical for FPCs to secure price premiums and minimize post-harvest losses. Raju et al. (2017) document that many FPCs in Andhra Pradesh lack local aggregation centers and reliable storage facilities, resulting in significant spoilage and elevated transaction costs. Beyond these infrastructure gaps, FPCs often contend with fragmented transport linkages in rural areas, which further inflate costs and erode farmers' margins. Govil et al. (2020) argues that, despite equity-grant schemes and working-capital loans, many FPCs lack the targeted investments in warehouses and processing hubs necessary to fulfill bulk orders and secure stable market linkages. Addressing these challenges will require targeted investments in rural warehousing, centralized aggregation hubs, and improved transport networks to ensure that FPCs can translate their collective scale into consistent market access and stable incomes.

Capacity Deficits and Skill Gaps: While FPCs are designed to operate with corporate efficiency, building members' managerial and technical capacities is essential to fully realize this potential. The strategic aspirations of FPCs are often undercut by gaps in managerial and technical skills. Kumari and Bisht (2023) identify deficiencies in financial planning, marketing analysis, and operational control among FPC leaders. Padmaja et al. (2019) further document that many FPCs lack the agronomic expertise and digital capabilities necessary for diversification into higher-value products. Kumari & Bisht (2023) highlighted core competencies required for the successful administration of "Farmer Producer Organizations" and their contribution to the performance of FPOs in the national capital area of Delhi in 2021. The component analysis validated six fundamental competencies for managing producer companies: planning and business growth, marketing management, controlling operations, financial management, democratic leadership, and managing business operations. Challuri & Patoju (2021) assessed the agricultural consulting and capacity-building offerings by FPCs, and it was rated as inadequate. Addressing these capacity constraints through targeted training and mentoring programs will be essential to unlock FPCs' full potential as engines of rural transformation.

5. Findings and Discussion

The study evaluated earlier works of literature written by writers who analyzed the connected features of the farmer-producer companies and their influence on the impact of these companies on farmers' livelihoods.

The formation of Farmer Producer Companies has arisen as an important strategy in recent years to improve the farmers' socio-economic circumstances. Farmers have come together to create these FPCs, which are collective enterprises owned by the farmers who form them. The primary goals of these FPCs are to increase farmers' negotiating power, improve access to resources, and boost overall agricultural production. This debate includes a thorough literature analysis of the influence of Farmer Producer Companies on the livelihoods of farmers, covering the positive outcomes that have been experienced by farmers in various locations as well as the possible obstacles that may be encountered by farmers in the future. Padmaja et al. (2019) verified that FPCs are increasing in popularity across a variety of FPO models. Particularly favourable conditions for expansion and development exist in a number of states thanks to the presence of supportive environments and forward-thinking farmers. It was discovered that different FPCs had varying products, procedures, and problem-solving philosophies.

In addressing our first research question, how Farmer Producer Companies (FPCs) affect farmers' economic outcomes, the literature consistently shows that collective aggregation of produce and inputs leads to higher net incomes and reduced losses. G. Singh & Vatta (2019) demonstrate that FPC membership raises annual earnings by approximately ₹9,983 and boosts household consumption and asset investment by ₹3,152 and ₹2,791 respectively, while Stockbridge et al. (2003) highlight how cooperative marketing diminishes post-harvest waste and secures premium output prices. Pathania et al. (2020) further report that bypassing intermediaries through direct sales and bulk procurement significantly increases profit margins, and equity grants of up to ₹10 lakh (Govil et al., 2020) alongside institutional credit access (Murray, 2008) have enabled many companies to invest in processing infrastructure though undercapitalization remains a key constrain (Amitha et al., 2021; Kumar et al., 2023).

Turning to our second question, what social and community benefits arise from FPC membership, the evidence indicates that these organizations foster trust networks, peer learning, and inclusive governance structures. Trebbin & Hassler (2012) show that formalized producer agencies build social capital that underpins joint decision-making, while Sajjad & Nasreen (2016) find that participation in FPCs enhances farmers' access to extension services and encourages adoption of sustainable practices. Mukherjee et al. (2019) marked improvements in human, social, and political empowerment among members of the Madhya Pradesh Women Poultry Producer Company, with a sustainability score of 0.87 and a 48.8 percent rise in incomes, and Vijayakumar (2021) illustrates how shared governance and peer mentoring strengthen community resilience during economic downturns.

Finally, relative to our third inquiry concerning challenges and barriers, several studies caution that governance deficits, financial shortfalls, and uneven member engagement threaten long-term viability.

Amitha et al. (2021) describe middling performance in Telangana resulting from weak leadership and poor communication, Rosairo et al. (2012) and Pandian & Ganesan (2019) identify low participation and opaque decision processes as trust-eroding factors, and both Trivedi et al. (2023) and Singh (2023) emphasize the adverse effects of chronic undercapitalization and NGO dependence. Govil et al. (2020) further note that procedural complexities in accessing government subsidies limit smaller FPCs' ability to scale. Collectively, these findings suggest that while FPCs offer substantial economic and social gains, targeted interventions in governance training, capital mobilisation, and streamlined policy support are required to overcome persistent barriers.

In sum, our analysis shows that Farmer Producer Companies can significantly enhance both economic returns and social cohesion for member farmers, but their long-term success hinges on addressing capital constraints, governance gaps, and access barriers.

6. Conclusion

In India, farming is becoming challenging, and the majority of farmers are leaving under pressure. With a number of programs and other creative initiatives, the government and civil society are battling to solve the issue. One such initiative that seeks to solve farmers' issues by bringing them to a collective platform is the creation of FPCs. The comprehensive evaluation of the literature on the impact of "Farmer Producer Companies (FPCs)" on farmer lives offers insightful information about the radical potential of these producer groups. According to study of the available literature, FPCs improve a variety of areas of farmer livelihoods, promoting sustainable agricultural growth and rural well-being.

FPCs have been found to greatly improve farmers' access to markets. FPCs let farmers earn higher prices for their goods by cutting out the middleman and engaging in direct sales, which in turn helps to stabilize rural economies. "Farmers' Producer Companies (FPCs)" help farmers increase their negotiating power, expand their access to financing and government backing, and modernize their farming methods, equipment, and infrastructure, all of which increases output and earnings. Additionally, FPCs play an important role in enhancing capabilities and sharing expertise. Farmers' yields and the quality of their harvests benefit from their newly acquired knowledge and the sustainable farming practices they learn via training and extension services. This helps farmers financially, but it also encourages them to embrace green farming methods, which helps ensure agriculture's long-term viability.

Despite the obvious benefits, the assessment also draws attention to various difficulties encountered by FPCs.

Potential areas of concern are highlighted, including governance and management concerns, financial viability, and market links. Resolving these issues is essential if FPCs are to continue having a positive effect on farmers' incomes in the long run.

Beyond substantive findings, our review advances qualitative synthesis practice in four ways. First, by employing a fully inductive thematic synthesis grounded in open, line-by-line coding of all 32 studies with regular intercoder calibration we provide a clear, replicable template for capturing emergent concepts without relying on predetermined theories.

Second, we integrated a CASP-based quality appraisal as an analytic attribute, assigning each paper a low/medium/high rigor score on criteria like methodological transparency and ethical consideration, and then weighting our thematic inferences accordingly. Third, we conducted manual matrix cross-tabulations (using spreadsheet software) to compare themes across study designs (qualitative vs. mixed-methods) and geographic settings, revealing methodological biases and regional gaps. Fourth, by structuring our synthesis into theme-specific subsections directly tied to research questions, we demonstrate how to maintain analytical focus and transparency in narrative reviews even without specialized software.

We recommend that subsequent reviews in this domain deepen methodological rigor by pursuing longitudinal ethnographies of FPC governance, applying mixed-methods triangulation to validate qualitative insights, and exploring participatory action research designs that engage farmer-members as co-researchers. Such innovations will not only enrich our understanding of FPC dynamics over time but also further strengthen the methodological toolkit for qualitative synthesis in rural development.

Ethical Approval: Ethical approval was not required for this manuscript.

Informed Consent: Informed consent was obtained from all participants involved in the study, ensuring respect for confidentiality and voluntariness principles.

Declaration of Conflicts of Interest: The authors declare that there are no conflicts of interest regarding the research, authorship, and/or publication of this article. The material has not been published, in whole or in part, elsewhere and is not currently under consideration for publication in any other journal. All authors were personally and actively involved in the work that led to this article and take responsibility for its content. All ethical standards regarding the protection of study participants were met, in accordance with the World Medical Association's Declaration of Helsinki.

Funding: The authors declare that there was no funding availed for the conduct of this study.

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