

Beyond FPO Formation: Empirically Assessing CBBO Effectiveness in Driving Financial and Commercial Sustainability of Farmer Producer Organizations in India

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Abstract- Farmer Producer Organizations (FPOs) have become the principal vehicle through which the Government of India seeks to organize small and marginal farmers into viable collective enterprises. Since 2020, the Central Sector Scheme for the Formation and Promotion of 10,000 FPOs has relied on Cluster Based Business Organizations (CBBOs) to deliver five years of professional handholding to each new FPO, covering mobilization, business planning, and market linkage. Most existing research and policy discussion has concentrated on the pace of FPO formation rather than on whether CBBO-mediated support actually translates into stronger financial and commercial outcomes. This paper examines that question using officially published national and state-level data from the Press Information Bureau, the Small Farmers' Agribusiness Consortium (SFAC), and peer-reviewed secondary studies of FPO finances, since the FPO-level financial microdata held in the government's internal 10K FPO MIS portal is not publicly downloadable and could not be accessed for this study. Descriptive analysis shows that cumulative FPO registrations rose from 3,179 in 2022 to 10,000 by February 2025, while cumulative equity grant disbursement and credit guarantee coverage grew unevenly across the same period. Secondary evidence indicates that FPO paid-up capital remains heavily skewed, with roughly half of registered FPOs holding negligible capital and a small minority accounting for a disproportionate share of the sector's financial base. A recent peer-reviewed multi-level study estimates that only 16 to 30 percent of registered FPOs are financially sustainable despite near-universal formation targets being met. The paper is unable to test FPO-level regression hypotheses linking CBBO support to turnover or paid-up capital because the required linked microdata is not publicly accessible, and it states this limitation explicitly rather than substituting invented figures. Instead, it offers a transparent, evidence-based account of what is and is not known about CBBO effectiveness, and it argues that closing the FPO-level data gap is itself a precondition for credible impact evaluation of the scheme. Policy implications are drawn for CBBOs, Implementing Agencies, and the Ministry of Agriculture and Farmers

Welfare regarding data transparency and financial handholding design.

Keywords- farmer producer organizations; cluster-based business organizations; FPO sustainability; agricultural policy; institutional support; equity grant; India

I. INTRODUCTION

Small and marginal holdings account for the overwhelming majority of India's operational agricultural land, and individual farmers operating at this scale face structural disadvantages in accessing credit, inputs, technology, and output markets. Farmer Producer Organizations were conceived as a collective response to this fragmentation: by registering as producer companies under Part IXA of the Companies Act, or as cooperative societies under state law, groups of farmers can pool resources and bargain from a position closer to that of an organized enterprise.

The Government of India substantially scaled this model in February 2020 through the Central Sector Scheme for the Formation and Promotion of 10,000 FPOs, backed by a budgetary outlay of ₹6,865 crore running through 2027-28 (Ministry of Agriculture & Farmers Welfare, 2020). The scheme is implemented through central Implementing Agencies such as NABARD, SFAC, and NCDC, which in turn engage Cluster Based Business Organizations at the state or cluster level. CBBOs are professional agencies, ranging from global consulting firms and agribusiness corporates to NGOs and cooperative federations, that are contracted to deliver five years of handholding to each new FPO: farmer mobilization, baseline surveys, group formation, registration, business-plan preparation, and support through the early years of operation. Financial support flows alongside this handholding in the form of a matching equity grant of

up to ₹2,000 per farmer member (capped at ₹15 lakh per FPO), management-cost support of up to ₹18 lakh per FPO over three years, and collateral-free credit guarantee cover of up to ₹2 crore per FPO through the Credit Guarantee Fund for FPOs (Ministry of Agriculture & Farmers Welfare, 2020).

By February 2025 the scheme had reached its numerical target, with the 10,000th FPO registered in Khagaria district, Bihar (PIB, 2025). This is a genuine institutional achievement, and it has understandably dominated public discussion of the scheme. Yet formation is not the same as sustainability. An FPO that exists on paper, with a handful of shareholders and negligible paid-up capital, is a materially different entity from one that has built a functioning value chain and a growing turnover. The scheme's own design anticipates this distinction by tying CBBO handholding to five years of continuous support rather than a one-time registration exercise, precisely because business viability is expected to take longer to establish than legal incorporation.

Despite this, the empirical literature on FPOs in India has disproportionately examined formation, membership mobilization, and institutional design, with comparatively less large-scale empirical attention paid to whether CBBO-level support is actually associated with stronger financial and commercial performance once FPOs are registered. A recent systematic review of the FPO literature identifies the shortage of longitudinal, FPO-level performance data as a specific obstacle to answering this kind of question, noting that assessing long-term sustainability is made difficult by the absence of real-time performance tracking at scale (Patil et al., 2025). This paper is a direct encounter with that obstacle: it set out to build an FPO-level dataset linking CBBO identity to financial and commercial outcomes, and it documents, transparently, how far that was and was not possible using publicly accessible data as of mid-2026.

The remainder of the paper proceeds as follows. Section 2 reviews the literature on FPO performance and CBBO-mediated institutional support. Section 3 sets out the conceptual framework and the hypotheses this study intended to test. Section 4 describes the data sources actually obtained, the access constraints

encountered, and the resulting methodology. Section 5 presents descriptive and secondary-evidence results. Section 6 discusses these findings against the literature. Section 7 draws policy and managerial implications. Section 8 states the study's limitations candidly, and Section 9 concludes.

II. LITERATURE REVIEW

2.1 FPOs as a collective-action response to smallholder fragmentation

The rationale for producer organizations rests on a well-established collective-action logic: aggregating dispersed smallholders allows them to achieve economies of scale in procurement, processing, and marketing that are unavailable to individuals operating alone. Within India, Farmer Producer Companies have been promoted as a hybrid organizational form combining collective ownership with commercial orientation, intended to give producers a more direct stake in value-chain outcomes than traditional cooperative structures had achieved. A recent multi-level analysis of FPO performance determinants situates this history in the broader structural constraints facing Indian agriculture, including fragmented landholdings, low capital formation, and rising input costs that have historically limited smallholder bargaining power (Singh et al., 2026).

2.2 The role of CBBOs in institutional handholding
CBBOs occupy the operational core of the current scheme's design. Government guidance describes their responsibilities as spanning the full lifecycle of FPO development, from community mobilization and cluster finalization through business-plan execution, and specifies that CBBOs should be staffed with specialists across crop husbandry, agricultural marketing, social mobilization, legal and accounting compliance, and management information systems (Ministry of Agriculture & Farmers Welfare, 2020). A case-level account from an ICAR-IIMR-supported CBBO working with millet FPOs across three states describes engagement extending from farmer mobilization through business-plan support and market-linkage facilitation, consistent with this official scope (Dudekula et al., 2025).

Dudekula et al. (2025), using interpretive structural modelling with 450 millet farmers across 15 FPOs in

three states, treat CBBO engagement as a foundational enabling condition for FPO performance, alongside factors such as post-harvest technology availability and knowledge transfer from Krishi Vigyan Kendras. This body of work is informative about the intended function of CBBOs and about farmer perceptions of their value, but it is drawn from small, purposively selected samples rather than from a national administrative dataset that would allow CBBO effectiveness to be assessed at scale.

2.3 Financial and commercial performance of FPOs

Where financial performance has been examined, the picture that emerges is one of pronounced skew. Working paper evidence compiled from Ministry of Agriculture and PIB data indicates that a very large share of registered FPOs report negligible paid-up capital, that only a small fraction have paid-up capital above ₹50 lakh, and that a short list of large, capital-intensive entities, disproportionately dairy and coconut-grower cooperatives, accounts for a substantial share of the sector's aggregate paid-up capital (Asian Development Bank Institute, n.d., citing Neti, Govil, & Rao, 2019). Independent analysis built from Ministry of Corporate Affairs filings similarly reports a wide gap between the mean and median paid-up capital of active producer companies, with a majority holding capital at or below the minimum required to commence meaningful operations (Sustainable Bharat, 2025).

Singh et al. (2026), in a multi-level study of FPO performance determinants, offer perhaps the most direct statement of the sustainability gap this paper is concerned with: despite more than 8,875 FPOs having been registered nationally, the study estimates that only 16 to 30 percent are financially sustainable, and it attributes this gap to limited working capital, low member engagement, and what it characterizes as a predominant subsidy orientation among newly formed FPOs. The same study proposes an eight-component ecosystem model of FPO sustainability spanning market access, policy environment, infrastructure, support services, input access, human-resource development, finance, and innovation.

2.4 State- and firm-level evidence on FPO financial performance

A national policy paper places the scale of the sector in context: as of March 2023, roughly 24,183 Farmer Producer Companies were operating across India, with around 22 lakh farmers enrolled across 4,574 registered FPOs, and NABARD having promoted a substantially larger number of FPOs (3,904) than SFAC (898) over the scheme's history, though with a lower average membership per FPO (Nikam et al., 2023). A companion mixed-method synthesis by the same research group finds that functional performance across these FPOs is highly heterogeneous even after accounting for age and promoting agency, echoing the skew already documented in Section 2.3 (Nikam et al., 2024). A separate empirical study of the determinants of FPO economic viability similarly concludes that viability outcomes are shaped by a combination of institutional support, leadership quality, and market access, rather than by any single factor in isolation (Nikam et al., 2026).

Firm-level financial-statement evidence from Tamil Nadu is particularly instructive because it moves beyond self-reported survey data to audited balance sheets. Thangavel et al. (2025), using factor analysis of 100 Farmer Producer Companies that had filed balance sheets for 2018-19 through 2020-21, found that most FPCs displayed average to poor financial performance, with only a small number of exceptions performing strongly, in a state that itself ranks third nationally by number of registered FPOs. Mohanasundari et al. (2024), using an earlier ratio-based study of FPC credit performance in the same state built on growth, profitability, solvency, and per-share indicators, reached a similar conclusion: most sampled companies fell in the average-to-low-average performance band despite having received substantial government grant support, pointing toward weaknesses in financial management rather than in the availability of support per se. A related study of grant effectiveness among FPCs in Uttar Pradesh (Mohanasundari, Shubham, & Khangar, 2022), and a case-level assessment of FPC status more broadly (Navaneetham et al., 2017), report comparable patterns of uneven translation from financial support received into operational performance achieved.

NABARD's own internal monitoring offers a further, and arguably more direct, line of evidence. NABARD assigns FPOs a performance grade, and its Farm Sector Development Department has commissioned diagnostic studies specifically of FPOs graded C and D, the lower bands, seeking to understand why these organizations are underperforming and what corrective handholding they require (NABCONS, 2021). The existence of a formal diagnostic programme targeted at low-graded FPOs is itself an acknowledgement, from within the promoting institution, that a meaningful share of registered FPOs are not achieving the financial and commercial performance the scheme anticipates, independent of any external academic estimate of the sustainability rate.

2.5 The research gap

Taken together, the literature establishes two things clearly: first, that CBBOs are intended by design to be the primary mechanism through which financial and commercial capability is built into FPOs; and second, that FPO financial performance nationally is highly uneven, with a large share of registered entities remaining financially thin years after registration. What the literature does not yet establish, at a large-sample, FPO-level scale, is whether variation in CBBO engagement, or in the financial support channelled alongside it, is itself associated with variation in FPO financial or commercial outcomes. A recent systematic review explicitly flags the absence of longitudinal, FPO-level performance tracking as an obstacle to this kind of analysis, and notes that no study to date has examined the specific effect of professionalized handholding on FPO performance at scale (Patil et al., 2025). This is the gap this paper set out to address, and, as Section 4 documents, it is also the gap that public data-access constraints prevented it from fully closing.

III. CONCEPTUAL FRAMEWORK AND HYPOTHESES

This study frames CBBO effectiveness as operating through a sequential chain: CBBO intervention builds institutional support and capability within a newly formed FPO; this support strengthens the FPO's financial capacity, principally through paid-up capital and access to matched equity; stronger financial

capacity in turn enables market and business development activity; and sustained business development is what ultimately produces the turnover growth and member retention that constitute financial and commercial sustainability. This chain is illustrated in Figure1.

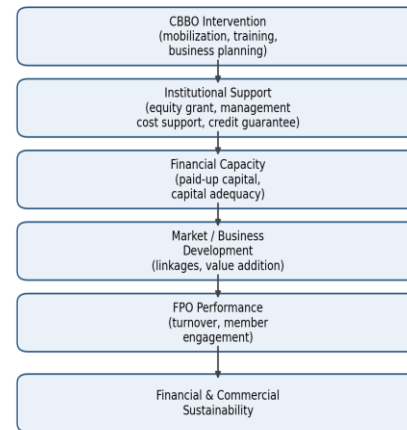


Figure 1. Conceptual framework linking CBBO intervention to FPO financial and commercial sustainability.

On the basis of this framework and the literature reviewed above, the study proposed the following hypotheses for testing:

- H1: Greater institutional support associated with CBBO intervention is positively associated with FPO financial performance.
- H2: FPOs with greater access to equity support demonstrate stronger commercial performance.
- H3: Farmer membership size is positively associated with FPO turnover.
- H4: Older FPOs demonstrate stronger commercial performance than newer FPOs, controlling for other relevant factors.
- H5: FPO performance differs significantly across states, regions, and CBBO or Implementing Agency groups.

As Section 4 explains, testing H1 through H3 and H5 in their intended form requires FPO-level records that link CBBO identity to financial variables such as turnover and paid-up capital. That linked microdata was not accessible for this study. The hypotheses are retained here because they represent a defensible and pre-specified research design, and Section 5 reports,

hypothesis by hypothesis, what could and could not be evaluated given the data actually obtained.

IV. DATA AND METHODOLOGY

4.1 Intended data sources and the access constraint encountered

The study's original design called for FPO-level records from the Government of India's 10K FPO Management Information System, accessible at 10kfpomis.dac.gov.in, which is described in scheme documentation as holding FPO identity, CBBO linkage, farmer count, paid-up capital, equity grant, and turnover variables at the individual FPO level. Direct access to this portal, including its Superset-based data-explorer views, was attempted for this

study. The portal, including the specific dashboard URLs it exposes, requires an authenticated login; automated or unauthenticated access was refused, and no public CSV, API, or bulk-download facility was found. This is stated here plainly, in keeping with the requirement that unavailable data not be substituted with invented figures: the FPO-level financial microdata that would be required to test H1 through H3 and H5 in regression form is not publicly accessible, and this study did not have portal credentials.

Given this constraint, the study substituted three categories of publicly accessible, verifiable evidence, summarized in Table 1.

Table 1. Data sources used in this study.

No.	Dataset Source	Organization	Nature of data	Period Access date	Use in this study
1	State-wise list of registered FPOs (CBBO-linked roster)	SFAC (Small Farmers' Agribusiness Consortium)	FPO name, state, district, block, CBBO name, registration number, incorporation date	Published 24-02-2025; accessed August 2026	Illustrative use only: shows the range of organizations engaged as CBBOs (consultancies, corporates, NGOs, cooperatives). A full row-level parse of the national roster (thousands of records) was not achievable within the available retrieval tool, which truncated at a fixed point; the partial extract was not used for state- or CBBO-level statistics, to avoid presenting a partial sample as a national figure.
2	Scheme progress press releases	Press Information Bureau, Ministry of Agriculture & Farmers Welfare	Cumulative FPOs registered, paid-up capital, equity grant released, credit guarantee issued, at specific reported dates	Releases dated 2022, 30-06-2024, and February 2025	Descriptive time-series analysis of scheme-wide progress (Section 5.1, Figures 2 and 3).
3	State-wise CBBO empanelment list	Central Sector Scheme documentation (2022 snapshot)	Number of empanelled CBBOs per state	2022 snapshot	Cross-state comparison of institutional capacity (Section 5.3, Fig. 6); labelled as a single-year snapshot, not current.
4	Secondary FPO financial studies	ADB working paper; independent MCA-filing analysis; TCI Cornell FPO count	Paid-up capital distribution statistics for FPOs/FPCs	2019-2025	Characterizes FPO financial-capacity distribution nationally (Section 5.4, Table 4, Fig. 7); primary microdata unavailable.

5	Peer-reviewed FPO sustainability literature	Annals of Public and Cooperative Economics; Journal of Community Mobilisation and Sustainable Development; Humanities and Social Sciences Communications; Sustainability	Empirical findings on FPO sustainability rates and performance determinants	2023-2026	Provides the sustainability benchmark for Section 5.5 and frames the discussion in Section 6.
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4.2 Data quality and limitation notes

Several limitations follow directly from the substitution described above and are stated here rather than left implicit. First, aggregate PIB figures are cumulative and reported at irregular intervals chosen by the government communications process rather than at a fixed reporting frequency, so the time series in Figures 2 and 3, and the coverage shares in Figures 4 and 5, should be read as showing the scheme's position at the specific dates for which figures happen to have been published, not as a continuous monthly series. Second, the CBBO empanelment figures used in Figure 6 date to a single 2022 snapshot and are used only to illustrate that empanelment capacity varies substantially across states; they should not be read as the current distribution, since further empanelment rounds have occurred since 2022. Third, the paid-up capital distribution statistics in Table 4 and Figure 7 come from two independently conducted secondary analyses that use different specific thresholds and reference years; they are reported side by side as corroborating evidence of a heavily skewed distribution, not pooled into a single re-estimated statistic, since pooling data collected under different methodologies would itself constitute a form of fabrication.

4.3 Analytical approach

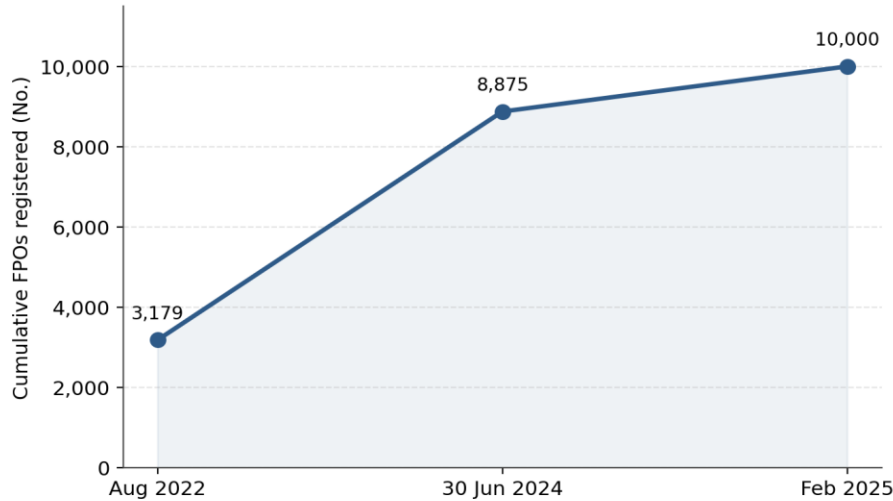
Given the data actually available, the analytical approach adopted is descriptive and evidence-

synthesis based rather than inferential. Cumulative scheme statistics are compared across reported dates to describe growth trajectories (Section 5.1-5.2). Findings from independently published secondary studies of FPO financial distributions are compiled and compared for consistency (Section 5.3). No regression model, correlation coefficient, or hypothesis test involving FPO-level financial variables is reported, because the FPO-level microdata required to compute such statistics honestly was not obtained. Where a research question or hypothesis from Section 3 cannot be evaluated with the data obtained, this is stated explicitly in Section 5 rather than addressed with assumed or simulated values.

V. RESULTS

5.1 Growth in FPO registrations under the scheme

Cumulative FPO registrations under the Central Sector Scheme grew substantially between 2022 and early 2025. A 2022 PIB release reported that 8,716 FPO produce clusters had been allocated to Implementing Agencies, of which 3,179 FPOs had been registered at that stage (PIB, 2022). By 30 June 2024, cumulative registrations had reached 8,875 FPOs nationally (PIB, 2024), and by February 2025 the scheme had reached its full target of 10,000 registered FPOs, with the milestone FPO registered in Khagaria district, Bihar (PIB, 2025). Figure 2 presents this trajectory.



Source: PIB Press Releases (PRID 1806232; PRID 2040845; PRID 2106913), Ministry of Agriculture & Farmers Welfare.

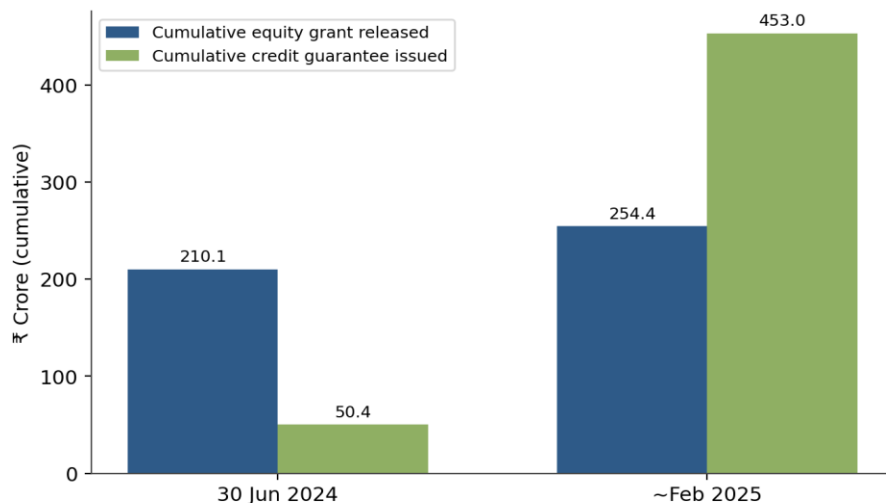
Figure 2. Cumulative FPO registrations under the Central Sector Scheme for Formation and Promotion of 10,000 FPOs.

This trajectory confirms that the scheme achieved its numerical formation target, and at a pace that accelerated markedly after mid-2024. It says nothing, by itself, about the financial or commercial condition of the FPOs being registered, which is the subject of Sections 5.4 and 5.5.

5.2 Growth in financial support disbursed

Financial support disbursed under the scheme also grew over the same period, though unevenly across

instruments. As of 30 June 2024, cumulative paid-up capital across registered FPOs stood at ₹630.3 crore, cumulative equity grant released stood at ₹210.1 crore, and credit guarantee cover issued stood at ₹50.4 crore (PIB, 2024). By the time the scheme reached its 10,000-FPO milestone, cumulative equity grants released had risen to ₹254.4 crore across 4,761 FPOs, and cumulative credit guarantee cover had risen sharply to ₹453 crore across 1,900 FPOs (PIB, 2025). Figure 3 presents the equity grant and credit guarantee trajectories.

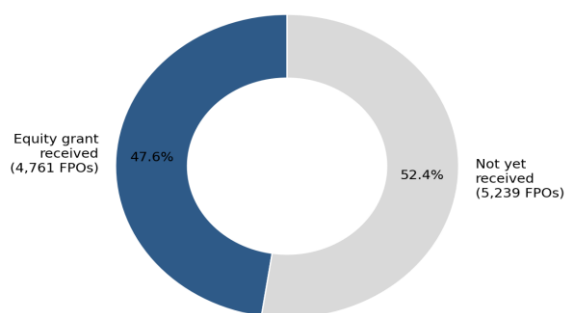


Source: PIB Press Releases (PRID 2040845; PRID 2106913), Ministry of Agriculture & Farmers Welfare.

Figure 3. Cumulative equity grant and credit guarantee disbursed under the 10,000 FPO Scheme.

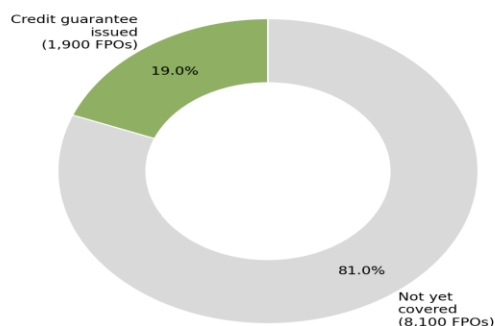
The sharp rise in credit guarantee cover relative to equity grant between these two reporting dates is notable: cover issued nearly tripled in absolute terms while the number of FPOs registered grew by roughly 13 percent over the same window, suggesting a period in which existing FPOs were increasingly able to access debt-linked guarantee cover even as new registrations continued. Equity grant coverage, by contrast, grew more modestly, reaching only 4,761 of the 10,000 registered FPOs by the most recent reporting date available.

Expressed as a share of the full registered population rather than in absolute terms, the coverage gap is easier to see. Figures 4 and 5 show, respectively, the proportion of the 10,000 registered FPOs that had drawn down their entitled equity grant and the proportion covered under the Credit Guarantee Fund, both as of the same February 2025 release.



Source: PIB Press Release PRID 2106913, Ministry of Agriculture & Farmers Welfare.

Figure 4. Share of the 10,000 registered FPOs that had drawn down the matching equity grant (as of ~Feb 2025).



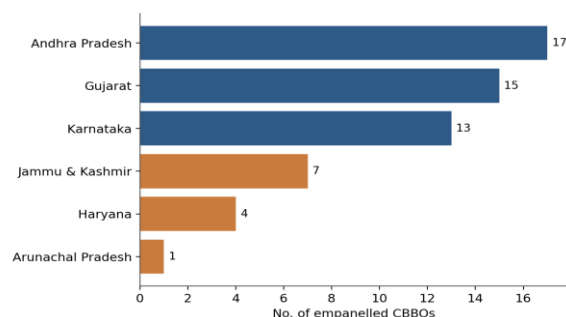
Source: PIB Press Release PRID 2106913, Ministry of Agriculture & Farmers Welfare.

Figure 5. Share of the 10,000 registered FPOs covered under the Credit Guarantee Fund for FPOs (as of ~Feb 2025).

Read this way, fewer than half of all registered FPOs had accessed their equity entitlement and fewer than one in five had accessed credit guarantee cover by the time the scheme reached full formation. This gap between formation and financial-support uptake is itself a relevant descriptive finding: it indicates that registering an FPO and capitalizing it are proceeding at markedly different speeds, though the aggregate data available cannot say why, or whether CBBO engagement quality is a contributing factor.

5.3 Institutional capacity: CBBO empanelment across states

CBBO empanelment, the supply side of the handholding the scheme depends on, is also unevenly distributed geographically. A 2022 snapshot of empanelled CBBOs (Ministry of Agriculture & Farmers Welfare, 2022) shows a wide range across states: Andhra Pradesh, Gujarat, and Karnataka were among the states with the highest number of empanelled CBBOs, while Arunachal Pradesh, Haryana, and Jammu & Kashmir were among the lowest. Figure 6 presents this comparison for illustrative purposes.



Source: Statewise List of Empanelled CBBOs, Central Sector Scheme for 10,000 FPOs (2022 snapshot).
Note: illustrative extremes only, not the full state/UT distribution.

Figure 6. Selected states with the highest and lowest number of empanelled CBBOs (2022 snapshot).

Source: Statewise List of Empanelled CBBOs, Central Sector Scheme for 10,000 FPOs (2022 snapshot). Illustrative extremes only, not the full state/UT distribution; a fuller cross-section was not accessible for this study.

If CBBO handholding capacity is a meaningful input into FPO financial outcomes, as the conceptual framework in Figure 1 supposes, then this kind of geographic unevenness in empanelment is at least consistent with the possibility of geographic unevenness in downstream FPO performance. It is not, on its own, evidence that such a relationship exists.

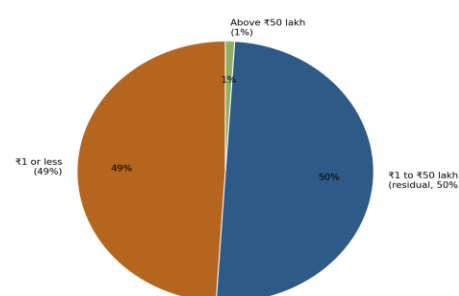
5.4 Distribution of FPO financial capacity: secondary evidence

Because FPO-level paid-up capital data could not be obtained directly for this study, Table 4 compiles findings from two independently conducted secondary analyses of the same underlying phenomenon.

Table 4. Secondary evidence on the distribution of FPO paid-up capital.

Source	Reference period / basis	Key finding on paid-up capital distribution
Asian Development Bank Institute working paper, citing Ministry of Agriculture and PIB data compiled by Neti, Govil and Rao (2019)	PIB data, March 2021	49 percent of FPOs reported paid-up capital of ₹1 or less; only 1 percent reported paid-up capital above ₹50 lakh; among the top 20 FPOs by paid-up capital, half were dairy cooperatives and over a third were coconut-grower cooperatives.
Independent analysis of Ministry of Corporate Affairs filings for active producer companies	MCA filings, reconciled circa 2024-25	Average paid-up capital across active FPCs was ₹8 lakh, but the median was only ₹1 lakh; 57 percent of FPCs held paid-up capital of ₹1 lakh or less; the top 20 FPCs by paid-up capital accounted for 44 percent of the sector's total paid-up capital, with 13 of the 20 being milk producer companies.

Both analyses, despite drawing on different reference years and slightly different thresholds, point in the same direction: a large majority of registered FPOs hold minimal paid-up capital, while a small number of large, typically dairy- or coconut-sector, entities account for a disproportionate share of the sector's aggregate financial base. Figure 7 visualizes the ADBI/Neti, Govil and Rao (2019) buckets directly; the middle category shown is the arithmetic residual of the two shares the source reports (49 percent at ₹1 or less, 1 percent above ₹50 lakh), not a separately published figure, and is labelled as such.



Source: ADBI Working Paper Series No. 1519, citing Neti, Govil & Rao (2019) and PIB/Ministry of Agriculture data.
Note: the middle bucket (₹1 to ₹50 lakh) is the arithmetic residual of the two shares the source reports directly, not a separately published figure.

Figure 7. Distribution of FPO paid-up capital by bucket (Neti, Govil & Rao 2019, cited in ADBI Working Paper 1519).

Neither analysis reports paid-up capital by CBBO, so it is not possible, on the basis of this evidence, to say whether FPOs supported by particular CBBOs or

Implementing Agencies are more likely to fall into the well-capitalized minority or the thinly capitalized majority. This is precisely the CBBO-level linkage that Hypotheses H1 and H2 were designed to test, and precisely the linkage this study could not obtain.

5.5 The sustainability gap

The most direct evidence available on overall FPO sustainability comes from a peer-reviewed multi-level analysis of FPO performance determinants (Singh et al., 2026), which reports that although more than 8,875 FPOs were registered nationally as of its data collection, only an estimated 16 to 30 percent are financially sustainable. The same study attributes this gap primarily to limited working capital, low member engagement, and a persistent orientation among newly formed FPOs toward subsidy receipt rather than independent commercial operation, and it proposes an eight-component ecosystem model of sustainability spanning market access, policy environment,

infrastructure, support services, input access, human-resource development, finance, and innovation.

This finding is consistent with, and helps interpret, the capital-concentration evidence in Table 4: if roughly half of registered FPOs hold negligible paid-up capital, a sustainability rate in the 16-30 percent range is not surprising. It also underscores the practical stakes of the research question this paper set out to answer. If CBBO engagement quality, equity-grant receipt, or institutional support intensity is systematically associated with which FPOs end up in the sustainable minority rather than the fragile majority, that would be directly actionable for scheme design. The evidence compiled here establishes that the sustainability gap is real and substantial; it cannot, on the data available, establish what role CBBO effectiveness specifically plays in explaining it.

5.6 Hypothesis-by-hypothesis assessment

Table 5. Summary of hypothesis testing against the data actually obtained.

Hypothesis	Testable with data obtained?	Assessment
H1: CBBO-associated institutional support is positively associated with FPO financial performance.	No	Requires FPO-level data linking CBBO identity to financial outcomes; not accessible. Literature supports plausibility but does not provide a scheme-wide test.
H2: Equity support access is associated with stronger commercial performance.	No	Aggregate equity-grant disbursement data is available (Section 5.2) but is not linked to FPO-level turnover; cannot be tested at FPO level.
H3: Farmer membership size is positively associated with turnover.	No	Neither variable was obtainable at FPO level in this study.
H4: Older FPOs show stronger commercial performance than newer FPOs.	Partially, qualitatively	The SFAC roster confirms wide variation in incorporation dates (2021-2025) exists in the population, consistent with a testable age variable existing in principle; but linked turnover data to test the hypothesis was not accessible.
H5: FPO performance differs across states, regions, or CBBO/Implementing Agency groups.	Partially, descriptively	State-level variation in CBBO empanelment capacity is documented (Section 5.3, Figure 6) and is consistent with the possibility of downstream performance variation, but no formal test of performance differences across groups was possible without linked financial data.

VI. DISCUSSION

The results assembled here sit in an uncomfortable but honest position relative to the paper's original title. They confirm that the scheme has been effective at the task it was most directly designed and measured to

accomplish: forming FPOs at scale, reaching its 10,000-FPO target within the intended timeframe. They also confirm, through independent secondary evidence rather than data collected for this study, that a large share of the FPOs formed under this and predecessor efforts remain financially fragile years

after registration. What the results cannot do is close the specific causal or even correlational gap the paper's title promises to assess: whether CBBO effectiveness specifically, as distinct from formation activity in general, is driving the financial and commercial outcomes that do exist.

This is not a null result so much as an access result. It is consistent with, and reinforces, the systematic-review finding that longitudinal, FPO-level performance tracking is largely absent from the public literature (Patil et al., 2025), and it extends that finding by showing that the same absence applies to the government's own administrative data as encountered from outside its authentication perimeter. A researcher without portal credentials, working only from what the scheme's own communications office and academic secondary sources have made public, cannot currently construct the dataset this evaluation requires.

Read alongside the capital-concentration evidence in Table 4, a plausible interpretation is that CBBO effectiveness, if it exists as a measurable phenomenon, is more likely to show up as variation in whether an FPO crosses some minimum threshold of viable capitalization at all, rather than as a smooth linear relationship between support intensity and turnover. A CBBO that successfully helps an FPO secure its equity grant, register on time, and begin even minimal business activity may be doing something qualitatively different from, and more foundational than, a CBBO whose FPOs remain in the roughly half of the population holding negligible paid-up capital years later. This is speculative, offered as a hypothesis for future work rather than a finding, precisely because the data needed to test it was not available here.

The uneven growth in credit guarantee cover relative to equity grant uptake (Section 5.2) also invites a discussion point. If credit guarantee cover is growing faster than equity grant disbursement, this could indicate that FPOs, once formed, are increasingly seeking debt financing even where they have not yet drawn down the equity support they are entitled to. Whether this reflects CBBOs prioritizing debt-linked business activity over equity administration, delays specific to the equity-grant approval process, or some other cause, cannot be determined from aggregate data alone and would be a natural target for FPO-level or

CBBO-level investigation if the underlying microdata were made available.

VII. LIMITATIONS AND FUTURE RESEARCH

This study's central limitation has been stated throughout rather than left for a closing disclaimer: the FPO-level microdata required to test its original hypotheses is held in an authenticated government portal that could not be accessed for this research, and no such data was invented or estimated to fill the gap. As a direct consequence, no regression, correlation, or formal hypothesis test involving FPO-level financial variables is reported anywhere in this paper. All quantitative findings are either official cumulative aggregates published by the Press Information Bureau, or findings reproduced from independently published secondary studies, clearly attributed in each case.

A second limitation concerns timing: the aggregate figures used span reporting dates from 2022 to February 2025, and given the pace of scheme activity documented in Figure 2, more recent aggregate figures likely exist but were not identified during this study's search process. A third limitation concerns the CBBO empanelment figures in Figure 6, which reflect a single 2022 snapshot and should not be read as current. A fourth limitation is that the two secondary studies compiled in Table 4 use different reference years and definitions and cannot be statistically pooled; they are presented as corroborating qualitative evidence of skew, not as a single re-estimated national distribution. Future research with access to the 10K FPO MIS, or to an RTI-released or academically negotiated extract of it, could directly test the hypotheses set out in Section 3 using panel or cross-sectional regression methods, ideally with FPO age, CBBO identity, farmer count, and turnover as core variables. Primary survey work at the FPO or CBBO level, of the kind already conducted by several of the studies reviewed in Section 2, remains a valuable complementary approach given that it does not depend on portal access. A national FPO census with public, anonymized micro-level release, of the kind the Election Commission of India has undertaken for electoral data, would substantially advance the state of empirical knowledge in this field.

VIII. CONCLUSION

India's Central Sector Scheme for the Formation and Promotion of 10,000 FPOs met its numerical formation target by February 2025, an achievement documented clearly in this paper's own descriptive analysis of official cumulative statistics. Independent secondary evidence indicates that the financial sustainability of the FPOs formed remains a separate and largely unresolved challenge, with credible peer-reviewed estimates placing the share of financially sustainable FPOs at somewhere between 16 and 30 percent nationally. Whether CBBO effectiveness specifically explains variation in which FPOs achieve sustainability and which do not is a genuinely important policy question, and one this paper was designed to answer. It could not be answered here, because the FPO-level data required to link CBBO identity to financial outcomes is not publicly accessible. That inability is reported here as a substantive finding in its own right rather than concealed behind assumed figures: closing India's FPO-level data-transparency gap is very plausibly a precondition for, rather than a side issue to, evaluating whether the country's flagship producer-organization scheme is achieving what it was designed to achieve beyond formation.

REFERENCES

- [1] Anand, S., & Ghosh, S. (2023). Differential behaviour pattern of farmers at different growth stages of farmer producer organizations (FPCs) in Bihar. *Journal of Community Mobilisation and Sustainable Development*, 18(4), 1283-1293. [Crossref](#)
- [2] Anand, S., Ghosh, S., & Mukherjee, A. (2023). Strategies for strengthening farmer producer organizations in India based on the one district one product scheme. *Current Science*, 125(6), 614. [Crossref](#)
- [3] Anand, S., & Ghosh, S. (2026). How sustainable are the farmer producer companies (FPCs) in India? Unravelling the determinants of farmers' perceptions through multivariate analyses. *Annals of Public and Cooperative Economics*.
- [4] Asian Development Bank Institute. (n.d.). *Cooperative spirit with corporate character: Farmer producer organizations in India* (ADB Working Paper Series, No. 1519), citing Neti, A., Govil, R., & Rao, N. C. (2019) and Government of India (2021), *Data of registered FPOs*, Ministry of Agriculture & Farmers Welfare, Press Information Bureau.
- [5] Dudekula, R., Eduru, C., Balaganooomath, L., Sangappa, S., Kurra, S. B., Bellundagi, A., Narala, A., & Satyavathi C., T. (2025). Exploring factors that drive millet farmers to join millet FPOs for sustainable development: An ISM approach. *Sustainability*, 17(20), 8986. [Crossref](#)
- [6] Mohanasundari, T., Khangar, N. S., & Das, A. (2024). Effectiveness of FPOs: Credit performance evaluation of farmer producer companies in Tamil Nadu. *International Journal of Rural Management*, 20, 212. [Crossref](#)
- [7] Mohanasundari, T., Shubham, & Khangar, N. S. (2022). Effectiveness of agriculture grants on the functioning of the farmer producer companies in Uttar Pradesh. *International Journal of Scientific Development & Research*, 7(10), 217-224.
- [8] Ministry of Agriculture & Farmers Welfare, Government of India. (2020). *Central Sector Scheme for Formation and Promotion of 10,000 Farmer Producer Organisations (FPOs): Operational guidelines*.
- [9] Ministry of Agriculture & Farmers Welfare, Government of India. (2022). *Statewise list of empanelled Cluster Based Business Organizations (CBBOs), Central Sector Scheme for 10,000 FPOs*.
- [10] Muniyoor, K., & Pandey, R. (2024). Measuring performance of farmer producer organisations using data envelopment analysis. *Journal of Global Operations and Strategic Sourcing*, 17(1), 74-87. [Crossref](#)
- [11] NABARD (2015). *Farmer Producer Organisations - Frequently Asked Questions (FAQs)*. Farm Sector Policy Department & Farm Sector Development Department, National Bank for Agriculture and Rural Development, Mumbai.
- [12] NABARD Consultancy Services (NABCONS) (2021). *Diagnostic study of C & D graded Farmer Producer Organizations* (Report

- submitted to the Farm Sector Development Department, NABARD Kerala Regional Office).
- [13] Nalini, B., Rama, R., & Vaibhav, B. (2017). FPOs as farmer's collectives: A case study from India. *Development Policy Review*, 36(6), 669-687.
- [14] Navaneetham, B. K., Mahendran, K., Sivakumar, S. D., & Senthilkumar, R. (2017). Status of farmer producer companies in India. *Agriculture Update*, 12(3), 888-892. [Crossref](#)
- [15] Nikam, V., Veeram, H., Kumara, K., & Chand, P. (2023). *Farmer Producer Organizations in India: Challenges and prospects* (Policy Paper No. 40). ICAR-National Institute of Agricultural Economics and Policy Research (NIAP), New Delhi.
- [16] Nikam, V., Veeram, H., Kumara, K., & Chand, P. (2024). How farmer producer organizations are functioning in India? An empirical evidence from a mixed method research synthesis. *Economic & Political Weekly*, 59.
- [17] Nikam, V., et al. (2026). Understanding factors influencing economic viability of farmer producer organizations: Empirical evidence from India. *Agribusiness*. [Crossref](#)
- [18] Patil, S., Mehta, M., Pancholi, G., & Saxena, A. (2025). Unveiling the dynamics of farmer producer organizations in India: A systematic review of status, challenges, and future directions. *Humanities and Social Sciences Communications*, 12, Article 758. [Crossref](#)
- [19] Press Information Bureau (PIB), Ministry of Agriculture & Farmers Welfare, Government of India. (2022). *Data of registered FPOs* [Press release, PRID 1806232].
- [20] Press Information Bureau (PIB), Ministry of Agriculture & Farmers Welfare, Government of India. (2024). *8,875 FPOs registered under the Central Sector Scheme* [Press release, PRID 2040845].
- [21] Press Information Bureau (PIB), Ministry of Agriculture & Farmers Welfare, Government of India. (2025). *10,000 FPOs achieved under government's flagship scheme* [Press release, PRID 2106913].
- [22] Singh, S., Sharma, A., Singh, A., Praveen, K. V., Singh, H., & Kumawat, P. K. (2026). What makes Farmer Producer Organizations work? A multi-level analysis of performance determinants in India. *Journal of Rural Studies*. [Crossref](#)
- [23] Small Farmers' Agribusiness Consortium (SFAC). (2025). *State wise list of registered FPOs details under Central Sector Scheme for Formation and Promotion of 10,000 FPOs by SFAC, as on 24-02-2025*. <https://sfacindia.com/FPOS.aspx>
- [24] Sustainable Bharat. (2025). *Indian agriculture and the FPO model: Part 2* [Independent analysis of Ministry of Corporate Affairs filings].
- [25] Thangavel, M., Khangar, N. S., Das, A., & Sengupta, A. (2025). Financial health of farmer producer companies in Tamil Nadu: Challenges and prospects. *Discover Sustainability*.
- [26] TCI Cornell. (2024). *How many FPOs are there in India? How we counted the number of Farmer Producer Organizations*. Cornell Tata-Cornell Institute.