



**TIGR<sup>2</sup>ESS**

Transforming India's Green Revolution  
by Research and Empowerment for  
Sustainable food Supplies



2022

# Demystifying the Performance of Farmer Producer Companies



UNIVERSITY OF  
CAMBRIDGE



**GLOBAL**  
FOOD SECURITY



**GCRF**  
Global Challenges  
Research Fund



## Life of an Organic Farmer

*Though mosquitoes suck my blood without my permission,  
They rely after all on our blood donation.  
The sharp sugar cane leaves do cut my flesh while weeding,  
No pain no gain, plants will grow well, thanks to my bleeding.  
Horse flies do harass me too, thinking I'm a donkey,  
Or because I'm white, they assume I am a Yankee.  
Ants hiding behind the leaves bite me mercilessly,  
They save themselves, nothing against me personally.  
While sweating like a horse, I think life is beautiful,  
I don't have to go to the Turkish bath, and that's cool.  
Like a soldier, a farmer has to shed sweat and blood.  
He may harvest his crop after facing drought or flood.  
The monsoon can bring hope, but also devastation,  
He prays for it, rains guarantee food for the nation.  
A farmer can sow seeds, work hard and hope for the best,  
For it is through God's Grace, if one day he can harvest.  
In Punjab, wheat and rice are the main cultivation,  
The only crops favoured by the green revolution.  
Punjabis don't relish rice, it's not their cup of tea,  
To grow food we don't eat is a great absurdity.  
Organic farmers don't believe in using pesticide,  
To work against nature is like committing suicide.  
To pollute soil and water is not sustainable,  
And produce pure and safe food, is only sensible.  
Multi cropping combined with a wise crop rotation,  
Can protect the soil from any deterioration.  
Such farming does not rely on petrochemistry,  
It provides healthy food for home and the country.  
Such farmers who produce their food are self-reliant,  
They won't make a fortune, but they are self-sufficient.  
Hard work and organic food keep the farmer healthy,  
If one stays in poor health, what's the point of being wealthy.  
Farmers who feed the world are looked upon with contempt,  
But when there is a lockdown, they are self-sufficient.  
Do boost your immune system in time of pandemic,  
Organic food will help you along with turmeric.*

Darshan Singh Rudel  
(Raza Farm, Nurpur Bedi)

# Transforming India's Green Revolution by Research and Empowerment for Sustainable food Supplies



## Demystifying the Performance of Farmer Producer Companies



# About TIGR<sup>2</sup>ESS

## Objectives and Outcomes Jointly Framed by the Consortium Partners

India's Green Revolution produced significant benefits. The greatest positive impact was felt in regions and on farmers who were able to harness benefits from the combination of new technologies, increased inputs and research-led innovation that have characterised agrarian transformation over the last fifty years. Despite these positive outcomes, there is widespread agreement that the 21st century demands new thinking to address new and emergent challenges, driven by changes in migration and settlement patterns, new forms of economic activity, changes in global commodity markets, and significant environmental challenges.

## Objectives

1. To define the requirements and set the policy agenda for a second Green Revolution in India, framed by demographic changes affecting rural communities and feminisation of smallholder farming systems.
2. To develop and strengthen alliances across a carefully selected network of UK and Indian experts to build a collaborative, long-term research partnership in sustainable agriculture that will set India on the path to a second Green Revolution.

## Flagship Projects

Objectives were attained through fundamental research, structured into six Flagship Projects.

- **FP1** Sustainable and Transformative Agrarian and Rural Trajectories (START);
- **FP2** Crop Sciences: Water Use and Photosynthesis;
  - Improving Water Use and Yield Stability in Millet and Sorghum;
  - Crop Sciences: Enhancing Photosynthesis;
- **FP3** Heat and Drought Resilience in Wheat;
- **FP4** Water Use and Management in a Changing Monsoon Climate;
- **FP5** Supply Chains: Modelling Water Use for Sustainable Livelihoods;
- **FP6** Impacting Wellbeing in Rural and Urban Communities: Education, Empowerment and Entrepreneurship Leading to Improved Human Nutrition;
  - Education Food, Nutrition and Empowerment (EFNE);
  - Education, Employment, Empowerment and Entrepreneurship (4E);
  - Cross-Cutting FP6 Projects are the Mobile Teaching Kitchens and the Innovation Farm Model.

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## Executive Summary

Traditionally, co-operatives have been structured based on user-ownership, -control, and -benefit. However, new generation aggregations have evolved due to globalisation and associated risk exposure. Spanning institutions of collective action and market-driven private enterprises, the farmer producer companies (FPCs) model is an emerging hybrid legal form of organisation. In India, a producer company is a corporate body registered as a Producer Company under the Companies Act, 1956 (amended in 2002 and subsequently in 2013).

Financial viability and operational self-sufficiency are the key performance indicators of the success of FPCs. However, preliminary evidence reveals little about the financial performance of FPCs in Punjab. Further, bulk evidence fails to acknowledge that financial performance varies across agricultural sectors. Thus, the present research endeavours to demystify the financial performance of 14 FPCs in Punjab for FY2019 and FY2020. A peer group and ratio analysis were conducted to determine their economic viability.

The findings highlight that it took over a decade after notification of the Act in 2002 to register the first FPC in Punjab. The producer companies deal in more than one agricultural commodity and a range of activities from procurement of inputs, marketing of products, and post-harvest aggregation to value-addition pursuits, like food processing and packaging. It is apparent from the shareholding pattern that the ownership is concentrated in the hands of a few individual investors. Further, these founding investors also retain the board of directors' seat. The performance shows negative margins and returns due to inadequate revenues or high operating and other costs. More serious concerns are deficient reporting and disclosures for these FPCs. Over 70 per cent of FPCs have idle cash, around 50 per cent hold inventories, and over 80 per cent show lower asset turnover indicating inefficiency in the use of resources in producing sales. Extremely high liquidity suggests that the accumulated current assets are not adequately utilised and lie idle. Due to the low proportion of debt to total assets (or capital), the capital structure ratios are below one.

The FPCs need to find ways to continue producing economically valuable goods and services while reducing their ecological impact. They must practise effective working capital management processes that yield substantial returns and reduce risks and costs. The members must be professionally trained, and the board should have representatives drawn from diverse professions and expertise. From a policy perspective, the government should ensure compliance with disclosure norms giving a bolder push for business transparency.



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*Suveera Gill*

*July 29th 2022*

## Abbreviations

AFPCL	Agaaz Farmer Producer Company Limited
AkFPCL	Akal Farmer Producer Company Limited
AzFPCL	Agrizone Farmer Producer Company Limited
BFPCL	Bathinda Farmer Producer Company Limited
BhFPCL	Bhamarsi Farmers Producer Company Limited
CFPCL	Changal Farmers Producer Company Limited
CSR	Corporate Social Responsibility
D&A	Depreciation and Amortization
DGPCL	Dholewal Grain Producer Company Limited
EAT	Earnings After Tax
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortization
EBT	Earnings Before Tax
eNAM	National Agriculture Market Electronic Trading
EPS	Earnings Per Share
FPC	Farmer Producer Company
FPO	Farmer Producer Organisation
FSVPCL	Fatehgarh Sahib Vegetable Producer Company Limited
FY	Financial Year
GFFPCL	Green Focus Farmer Producer Company Limited
KFPCL	Khamano Farmers Producer Company Limited
LT	Long Term
NABARD	National Bank for Agriculture and Rural Development
NFPCL	Nojvan Farmer Producer Company Limited
NFSM	National Food Security Mission
PAGREXCO	Punjab Agri Export Corporation Limited
PODF	Producer Organisation Development Fund
POVFPCL	Punjab Organic Fruit and Vegetable Farmer Producer Company Limited
RFPC	Rupnagar Farmer Producer Company Limited
RKVY-	Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture
RAFTAAR	and Allied sector Rejuvenation
ROA	Return on Assets

ROE	Return On Equity
ROIC	Return On Invested Capital
SFAC	Small Farmers Agribusiness Consortium
SFPCL	Sanjh Farmer Producer Company Limited
ST	Short Term

## Conversion Table

### Units

1 crore = 10 million

1 million = 10 lakh

1 lakh = 100000

1 billion = 1000 million

## 1 Agrarian Collectivism

Managing interdependence is the primary purpose of agrarian collectivism. The participatory approach to farming has a positive economic impact on member producers (rise in income and increased market participation) and the production systems (increase in yield, better access to and use of inputs, services, and technologies). Further, food security, health, human and social capital, as well as women's status and agency, are the associated social benefits (Fonte and Cucco, 2017; Bilewicz and Śpiewak, 2019). Lately, the contribution of the collectives to environmental performance, such as implementing more sustainable production technologies, has also been recorded (Ortiz-Miranda et al., 2010; Balnave and Patmore, 2012; Wynne-Jones, 2017). Overall, collective action not only improves the production and trade of agriculture but aids the development of regions across the food system (Ilbery and Maye, 2005; Ajates Gonzalez, 2017; Swagemakers et al., 2019). There is a policy imperative to support the collective action of farmers in both developed and developing countries (Michalek et al., 2018). The existing literature on the collectivism of small farmers in developing countries is primarily facilitated by the state through suitable policy interventions (Bernard and Spielman, 2009; Singh and Singh, 2014; Song et al., 2014; Orsi et al., 2017; Gebrehiwot et al., 2018; Kiptot and Franzel, 2019).

There are alternative forms of farmers' collectivisation for the well-being of the farming community. The seminal work of Nourse (1922) and subsequent contribution by Philipps (1953) and Helmberger and Hoos (1962) present two strands of economic behaviour of co-operatives – as an extension of individual farms and as investor-owned firms. The former is often considered economically less efficient than the latter (Hendrikse and Feng, 2013). The difference is in the governance structure that varied in organisational form (internal control systems and democratic decision making) and finance sourcing (retained earnings and outside equity). However, scholars have generally missed the social focus of the co-operatives (Kalmi, 2007). Still, others believed that the co-operatives are a coalition of participants (different groups of farmers, management, board members, suppliers, creditors, and customers) with heterogenous expectations and objectives (e.g., Kaarlehto, 1955; Ohm, 1956; Trifon, 1961; Pichette, 1972). Thus, striking a trade-off in pursuits hinges on the class of co-operative, its structure, the membership type, the goods and services it provides, and the market environment in which it operates.

Traditionally, co-operatives have been structured based on user-ownership, -control, and -benefit (Filippi, 2014; Benos et al., 2016; Figueiredo and Franco, 2018). However, due to

globalisation and associated risk exposure, new generation co-operatives, limited co-operative associations, and limited liability companies have evolved (Chaddad and Cook, 2004; Kalogeras et al., 2013; Benos et al., 2016; Grashuis 2018). Increasingly, studies have examined the impact of the new organisational restructuring and strategic attributes on performance (Bijman et al., 2014; Benos et al., 2016; Iliopoulos et al., 2019). Some argue that the new legal entities, like the new-generation co-operatives in developed countries, especially in the USA and Canada (Carlberg et al., 2006) and business-like entities in Sri Lanka (Rosairo et al., 2012) as well as India (Singh and Singh, 2014) show a better promise. New generation co-operatives are economically efficient, financially viable, and gain the trust of their members (Harris et al., 1996; Nilsson, 1997).

A concerted effort has been made to strengthen the collective action movement by mobilising small farmers through farmer producer organisations. Most farmer organisations offer a wide range of services to their members – organisational, production, marketing, financial, technology, education and welfare services (Collion and Rondot, 2001; Hellin et al., 2009; Markelova et al., 2009; Narrod et al., 2009) with differing impact on farmers' performance (Duvaleix-Treguer and Gaigne, 2015). Moreover, the literature investigating the effect of producer organisations or similar collectivism action on its members' performance is somewhat limited, predominantly from developing countries, and puts forth mixed results (e.g., Bernard et al., 2008; Vandeplass et al., 2013; Verhofstadt and Maertens, 2015). In developing countries, farmer-producer organisations reduce market barriers related to transaction costs of accessing markets, market information, credit, technologies, and food safety norms (Markelova et al., 2009; Chagwiza et al., 2016; Latynskiy and Berger, 2016).

Straddling institutions of collective action and market-driven private enterprises, the farmer producer companies (FPCs) model is an emerging hybrid legal form of organisation. FPCs are legal institutions that provide a professional conduit to organise and conduct business for farmer producers (Singh and Singh, 2014; Govil and Neti, 2022). The corporate characteristics of a distinct entity and perpetual succession handle the perennial hurdles of financial constraint and opportunism, resulting in resilient entities. In addition, the annual reporting and transparent disclosures act as a disciplinary mechanism and reduce information asymmetry. Further, exposure to market dynamism puts competitive pressure to perform (Trebbin and Hassler, 2012). However, preliminary evidence shows that the lack of awareness, under capitalisation, operational inefficiencies, weak credit linkages (especially during the early stages), lack of skilled staff, as well as unprofessional management and sound governance

challenge the functioning of such companies (Singh, 2008; Mahajan, 2014; Trebbin, 2014; Shah, 2016; Badatya et al., 2018; Neti et al., 2019; Deka et al. 2020; Govil et al., 2020), resulting in poor performance and dependence on the government or other agencies (Kakati, 2017; Kakati and Roy, 2019; Mourya and Mehta, 2021). On the other hand, Das and Mandal (2021), based on a study of households associated with two FPCs in West Bengal, observed that FPCs enabled better access to inputs and credit, which had a favourable impact on the income of its members. FPCs can become viable if they pursue a push strategy to market and innovate operations as well as government support (Dey, 2018).

Financial viability and operational self-sufficiency are the key performance indicators of the success of farmer-producer enterprises (Kanitkar, 2016). Most of the literature examining the performance of FPOs has been cross-case qualitative analyses (Khan and VanWynsberghe, 2008), focusing primarily on the legal status, life cycle stage, business domain and linkages, sponsored agency and stakeholders, governance and management (Dey, 2018). However, the assessment of financial performance has been restricted to turnover and profits (e.g., Desai and Joshi, 2014; Singh and Singh, 2014; Nayak, 2016). Lately, a few researchers have carried out an analysis of the financial statements by using financial ratios, trend analysis, as well as the ranking and relational analysis to highlight that FPCs performed poorly in terms of profitability, efficiency and solvency (Garg, 2012; Kakati and Roy, 2017, 2021; Chauhan and Murray, 2019; Mourya and Mehta, 2021). However, it was observed that the geographical spread of the sample was concentrated in the western, central and southern regions of India. Kakati and Roy (2021) covered 83 FPCs over fourteen states and one union territory, but the region-wise sample representation is ambiguous. Thus, preliminary evidence reveals little about the financial performance of FPCs in Punjab. Further, bulk evidence has failed to acknowledge that financial performance varies across agricultural sectors. For instance, the performance of crop- or vegetable-based farming is incomparable with that of livestock or dairy farming (Ganesh, 2017). Thus, the present research endeavours to demystify the financial performance post-contextualising of FPCs in Punjab for FY2019 and FY2020.

## **2 Farmer Producer Companies and Policy Ecosystem**

With the mandate to propose legislation to incorporate cooperatives as companies and enable the conversion of existing cooperatives into companies, a high-powered committee was constituted under the chairmanship of Prof. Y. K. Alagh in 1999.<sup>1</sup> The Committee observed

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<sup>1</sup> <https://www.mca.gov.in/bin/dms/getdocument?mds=BgMB3LLrRXN0%252BsoUYdBn2A%253D%253D&ty pe=open>

that if co-operatives want to remain relevant in an evolving and competitive environment, they need to metamorphose into an alternative institutional form. Based on the recommendations and legislations proposed to amend the Companies Act, 1956 (hereinafter, the Act) in 2000, Part IXA (Sections 581A to 581ZT) was inserted into the Act in 2002, and came into effect in January 2003.

According to Section 581A(m), Chapter I, Part IXA of the Companies Act, 1956 (as amended in 2013), “*Producer institution means a producer company or any other institution having only producer or producers or producer company or producer companies as its member whether incorporated or not having any of the objects referred to in Section 581B and which agrees to make use of the services of the producer company or producer companies as provided in its articles.*”<sup>2</sup> A producer is anyone engaged in any activity connected to or relatable to any primary produce. Primary produce is the produce of farmers from agriculture (including animal husbandry, floriculture, horticulture, pisciculture, re-vegetation, bee raising, forestry, forest products and farming plantation products), produce of handloom, handicraft and other cottage industries, as well as the product resulting from any ancillary activity. Further, a producer company is a corporate body with objects or activities specified in Section 581B.

Initiatives have been taken at the central and state levels to collectivise farmers into producer organisations. The Central Government issued the National Policy and Process Guidelines for FPOs in March 2013. With a dedicated source of funding, the formation of farmer producer organisations (FPOs) has been supported through the Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied sector Rejuvenation (RKVY-RAFTAAR).<sup>3</sup> The Ministry of Agriculture, Cooperation and Farmers’ Welfare promoted the Small Farmers Agribusiness Consortium (SFAC) and initiated organising small and marginal farmers as farmers’ interest groups, FPOs, and FPCs. SFAC implements the national demonstration projects under the re-vamped National Food Security Mission (NFSM) and a single unified market through the National Agriculture Market Electronic Trading (eNam) platform.<sup>4</sup> For capacity building of the FPOs across the tomato, onion and potato value chain, a centrally sponsored scheme, Operation Greens, was initiated.<sup>5</sup> India’s apex financial institution, the National Bank for Agriculture and Rural Development (NABARD), has been

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<sup>2</sup> [https://www.mca.gov.in/Ministry/pdf/Producer\\_Company.pdf](https://www.mca.gov.in/Ministry/pdf/Producer_Company.pdf)

<sup>3</sup> [https://nivedi.res.in/NaaViC/rkvy-raftaar/#:~:text=Rashtriya%20Krishi%20Vikas%20Yojana%20%E2%80%93%20Remunerative,Farmers%20Welfare\(MoA%26FW\).](https://nivedi.res.in/NaaViC/rkvy-raftaar/#:~:text=Rashtriya%20Krishi%20Vikas%20Yojana%20%E2%80%93%20Remunerative,Farmers%20Welfare(MoA%26FW).)

<sup>4</sup> <http://sfacindia.com/UploadFile/Statistics/Farmer%20Producer%20Organizations%20Scheme.pdf>

<sup>5</sup> <https://www.mofpi.gov.in/Aatmanirbhar-Bharat/Operation-Greens-%28TOP-to-Total%29/about-og-total>

financing FPOs under the Producer Organisation Development Fund (PODF).<sup>6</sup> Further, it created its subsidiary, NABKISAN Finance Ltd., to meet the credit requirements of FPOs.<sup>7</sup> In a recent initiative, the Central Government announced the formation of ten thousand new FPOs in produce clusters to ensure economies of scale for farmers.<sup>8</sup>

**Box 1** Objects (Activities) of Producer Companies under the Companies Act, 2013

- (a) Production, harvesting, procurement, grading, pooling, handling, marketing, selling, exporting of primary produce of the members or importing of goods or services for their benefit. They may carry on any of the activities specified in this clause either by itself or through other institutions
- (b) Processing, including preserving, drying, distilling, brewing, venting, canning and packaging of the produce of its members
- (c) Manufacture, sale or supply of machinery, equipment or consumables mainly to its members
- (d) Providing education on the mutual assistance principles to its members and others
- (e) Rendering technical services, consultancy services, training, research and development and all other activities for the promotion of the interests of its members
- (f) Generation, transmission and distribution of power, revitalisation of land and water resources, their use, conservation and communications relating to primary produce
- (g) Insurance of producers or their primary produce
- (h) Promoting techniques of mutuality and mutual assistance
- (i) Welfare measures or facilities for the benefit of members as may be decided by the Board of Directors
- (j) Any other activity, ancillary or incidental to any of the activities referred to in clauses (a) to (i) or other activities which may promote the principles of mutuality and mutual assistance amongst the members in any other manner.
- (k) Financing of procurement, processing, marketing or other activities specified in clauses (a) to (j) which include extending credit facilities or other financial services to its members.

**Note:** As of Clause 581B, objects can relate to all or any activities.

**Source:** Companies Act, 2013 ([https://www.mca.gov.in/Ministry/pdf/Producer\\_Company.pdf](https://www.mca.gov.in/Ministry/pdf/Producer_Company.pdf)).

<sup>6</sup> <https://www.nabard.org/contentsearch.aspx?AID=1365&Key=PODF>

<sup>7</sup> <https://www.nabkisan.org/policies>

<sup>8</sup> <https://pib.gov.in/Pressreleaseshare.aspx?PRID=1696547>



## Box 2 Key Provisions under the Companies Act, 2013 about Producer Companies

- The name of the company to end with the words ‘Producer Company Limited’, with a minimum capital of Rs. 5,00,000
- On registration, the producer company is taken as akin to a private limited company for application of law and administration. Therefore, it cannot be deemed a public limited company; however, it can be converted into a multi-state co-operative society.
- The producer company can carry out only activity prescribed under the Act, and the members have to be necessarily engaged as primary producers
- The share capital of the producer company shall consist of equity shares only, which cannot be traded. The liability of the members is limited to the amount, if any, unpaid on the shares.
- There has to be a minimum number of ten members, though there is no limit to the maximum number of members
- There have to be a minimum of five and not more than fifteen directors
- The producer company have a full-time chief executive to be appointed by the board amongst persons other than the members
- Profit share is in the ratio of business contribution and investment. Members are eligible to receive bonus shares and ‘patronage’ bonuses out of surplus income, which is akin to dividends
- In a case where the producer company does not have sufficient funds in any financial year, the contribution to the reserve shall be shared amongst the members in proportion to their ‘patronage’ in that year
- A producer company can provide financial assistance to its members through credit facilities as well as loans and advances
- The auditors of producer companies are required to report on some additional items besides making annual audit reports
- The Registrar of Companies can strike the name of the company if it fails to commence business within one year from the date of registration or ceases its transactions after giving the appropriate notice

**Source:** As construed from the Companies Act, 2013 ([https://www.mca.gov.in/Ministry/pdf/Producer\\_Company.pdf](https://www.mca.gov.in/Ministry/pdf/Producer_Company.pdf)).

The draft Punjab State Farmers' Policy prepared by the Punjab State Farmers' and Farm Workers' Commission (June 2018) is a first attempt to propose active collectivisation of small and marginal farmers into commodity-specific FPOs in Punjab.<sup>9</sup> Further, the Agri Export Policy for the State of Punjab (November 2019) aims to promote public-private involvement in developing competitive export infrastructure and farm production for better FPO linkages.<sup>10</sup> The government of Punjab, through the state nodal agency, Punjab Agri Export Corporation Limited (PAGREXCO), is a catalytic in promoting FPOs registered or due to register under the Companies Act, 2013, Society Registration Act 1980, or the central and state Cooperative laws. Through its triple objectives – to provide expert handholding and resources, remove hurdles to access markets, and create enabling policy environment for investments – PAGREXCO aims to double the farmer's income. However, as of 2020, there were 18 FPCs in Punjab, which accounts for only 0.69 per cent of the total number present pan-India.<sup>11</sup> Though corporatising of the farming sector has been prevalent in Punjab since the 1990s (Singh, 2012), there seems to be a lack of policy impetus on the role of farmer collectives beyond cooperatives.

### **3 Methods and Tools**

Performance measurement is a valuable tool to assess the progress towards meeting the underlying objective of forming the FPCs by demonstrating how their cohesiveness helps support regional farmers. Performance measures provide data, but standalone is of little value. Comparing performance with peers, i.e., similar companies provide context that can be very valuable, especially when done on an individual company basis. This provides a basis to evaluate an FPC's performance and identify outliers, i.e., those who stood out from their peers.

#### **3.1 Sample and data sources**

Under the Agriculture and Allied sector, eighteen Punjab-based FPCs are listed on the portal maintained by FPO Junction (developed jointly by NABARD, Bankers Institute of Rural Development and GIZ, GmbH). Out of the listed, fourteen active FPCs filed their most recent audited financial statements (FY 2018-2019 and FY 2019-2020) with the Registrar of Companies, thus forming the study sample (Table 1). The data was sourced from the database maintained by the Ministry of Corporate Affairs (<https://www.mca.gov.in/mcafoportal/view>

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<sup>9</sup> <https://www.psfc.org.in/english.pdf>

<sup>10</sup> [https://punjabagro.gov.in/wp-content/uploads/2020/07/Agri-Export-Policy-for-State-of-Punjab-Page-1-12\\_0.pdf](https://punjabagro.gov.in/wp-content/uploads/2020/07/Agri-Export-Policy-for-State-of-Punjab-Page-1-12_0.pdf)

<sup>11</sup> <https://www.fpojunction.com/fpo-map>

**Table 1** Sample FPCs

S. No.	Name	District
1.	Agaaz Farmer Producer Company Limited (AFPCL)	Jalandhar
2.	Agrizone Farmer Producer Company Limited (AzFPCL)	S.A.S. Nagar
3.	Akal Farmer Producer Company Limited (AkFPCL)	Fatehgarh Sahib
5.	Bathinda Farmer Producer Company Limited (BFPCL)	Bathinda
4.	Bhamarsi Farmers Producer Company Limited (BhFPCL)	Fatehgarh Sahib
6.	Changal Farmers Producer Company Limited (CFPCL)	Sangrur
7.	Dholewal Grain Producer Company Limited (DGPCL)	Fatehgarh Sahib
8.	Fatehgarh Sahib Vegetable Producer Company Limited (FSVPCL)	Fatehgarh Sahib
9.	Green Focus Farmer Producer Company Limited (GFFPCL)	Sangrur
10.	Khamano Farmers Producer Company Limited (KFPCL)	Fatehgarh Sahib
11.	Nojvan Farmer Producer Company Limited (NFPCL)	Patiala
12.	Punjab Organic Fruit and Vegetable Farmer Producer Company Limited (POVFPCL)	Patiala
13.	Rupnagar Farmer Producer Company Limited (RFPCL)	Rupnagar
14.	Sanjh Farmer Producer Company Limited (SFPCL)	Sri Muksar Sahib

Source: <https://www.fpojunction.com>.

PublicDocumentsFilter.do), Government of India. There was no other secondary source of information as the FPCs do not maintain their company websites. Information about the names of the resource institutions providing support to FPCs was retrieved from the websites of SFAC (<http://sfacindia.com/List-of-FPO-Statewise.aspx>) and NABARD (<https://nabfpo.in/images/staticFPO.html#Punjab7>).

### *3.2 Peer group analysis*

A peer group analysis was carried out on the corporate antecedents, business activity, and performance based on the corporate information filed by the FPCs with the Ministry of Corporate Affairs. The comparative financial statement analysis was drawn from the key financial statements that are the statement of financial position (balance sheet), income statement (profit and loss account), cash flow statement, and supplementary information to financial statement (notes and schedules).<sup>12</sup> The balance sheet portrays the company's financial position by disclosing the economic resources owned by the company (assets) and what it owes (liabilities) at a given time. At the same time, the income statement presents information on the financial performance (profit or loss) of a company's business activities over a period of time.

<sup>12</sup> The cash flow statement (disclosing information about a company's cash inflows and cash outflows during an accounting period), which is an important constituent of the financial statements, was prepared by only one FPC, viz., Bhamarsi Farmers Producer Company (BhFPCL).

The cash flow statement provides information about cash inflows and outflows during an accounting period. In addition, a company provides other relevant information, such as different assumptions and detailed disclosures, that enables one to understand the financial reports better. Further, an independent auditor must audit the company's annual financial reports to provide reasonable assurance of the truth and fairness. The auditor's report was also checked on the nature of audit opinion.

Ratio analysis is among the most popular and widely used financial analysis tools. A ratio shows a mathematical relationship between one quantity with another. A temporal and cross-sectional comparison of ratios provides valuable information on comparative valuations. Measures of profitability, return on invested capital, asset utilisation and efficiency, liquidity, and capital structure and solvency were calculated, as shown in Table 2. Analysing a company's profitability is assessing its operating performance. The measures of operating performance (at the gross, operating, pre-tax or net income level) enable evaluation of profit margins from operating activities. Further, earnings per share (EPS) signifies the share of profit available to a shareholder and operating cash flow to income suggests the profit recognition aggressiveness of the company. Return on investment or invested capital refers to a company's income relative to the level and source of financing (creditors and shareholders). It uses key summary measures from both the income statement (income) and the balance sheet (financing) to assess profitability. Asset utilisation or asset turnover measures the intensity of utilisation of assets. An efficiency ratio shows how successfully a company manages its activities, especially its assets, to generate sales. Liquidity refers to a company's ability to raise short-term cash to meet its obligations. It depends on cash flows and the composition of current assets and current liabilities. Solvency is a company's long-run viability and ability to pay its long-term obligations and depends on long-term profitability and capital structure.

#### **4 FPC Profiling**

The FPCs under study are primarily (64%) concentrated in the districts of Fatehgarh Sahib (5), Patiala (2), and Sangrur (2), which fall in the central agro-climatic zone. Two each fall in the northeast (districts of S.A.S. Nagar and Rupnagar) and southwest (districts of Bathinda and Sri Muktsar Sahib) zones, as depicted in Figure 1. A brief profile of the sample FPCs is provided in Table 3. It took over a decade after notification of the Act in 2002 to register the first FPC (i.e., Rupnagar Farmer Producer Company Limited in 2013) with the Registrar of Companies,

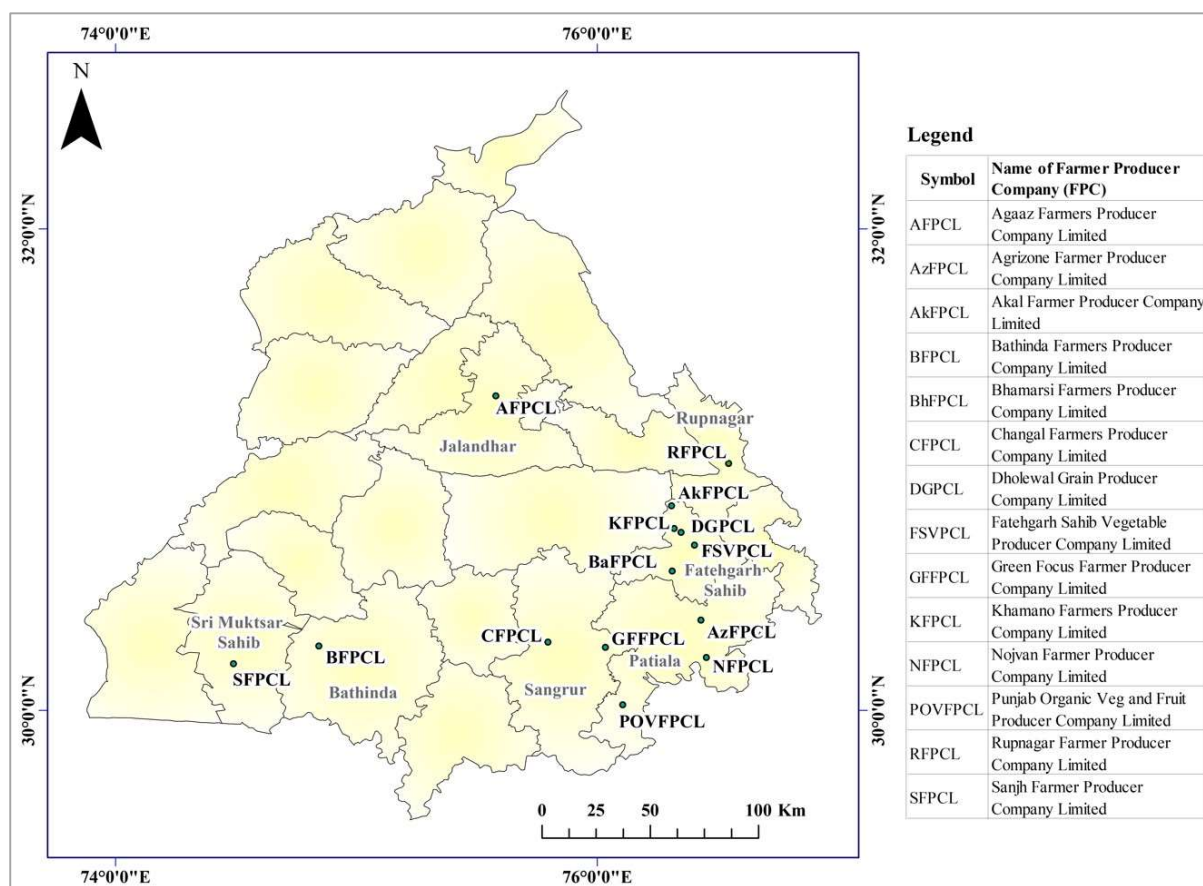
**Table 2** Performance Measures and Ratios

Measure	Ratio	Numerator	Denominator
Profitability	Gross profit margin	Sales – cost of goods sold	Sales
	Operating profit margin	Earnings before interest and tax	Sales
	Pre-tax profit margin	Earnings before income tax	Sales
	Net profit margin	Earnings after tax	Sales
	Earnings per share (EPS)	Earnings after tax	Weighted average number of ordinary shares outstanding
	Operating Cash Flow to Income	Cash flow from operations	Earnings after tax
Return on Invested Capital	Return on assets (ROA)	Earnings after tax + interest expense (1 – tax rate)	Average total assets
	Return on equity (ROE)	Earnings after tax	Average common shareholders' equity
	Return on invested capital (ROIC)	Earnings after tax – dividend payout	Average long-term debt + average common equity
Asset Utilisation and Efficiency	Cash turnover	Sales	Average cash and cash equivalents
	Inventory turnover	Cost of goods sold	Average inventory
	Accounts receivable turnover	Sales	Average accounts receivable
	Days of inventory	Number of days in the period*	Inventory turnover
	Days receivables outstanding	Number of days in the period*	Receivables turnover
	Working capital turnover	Sales	Average working capital
	Fixed asset turnover	Sales	Average fixed assets
	Total asset turnover	Sales	Average total assets
Liquidity	Cash	cash + cash equivalents + marketable securities	Current assets
	Quick	Cash + cash equivalents + marketable securities + accounts receivable	Current liabilities
	Current	Current assets	Current liabilities
Capital Structure and Solvency	Total debt to total assets	Total debt	Total assets
	Total debt to equity	Total debt	Shareholder's equity
	Long-term debt to equity	Long-term debt	Shareholder's equity
	Financial leverage	Total assets	Common shareholder's equity

**Note:** \*365-day a year.

**Source:** Gill (2015).

**Figure 1** Location of FPCs in Punjab



Source: Depiction by Kralia (Department of Geology, Panjab University).

Chandigarh.<sup>13</sup> The maximum number was incorporated in 2017 (5), followed by 2016 (3). The youngest FPC (i.e., Changal Farmers Producer Company Limited) was registered in 2019 as shown in Figure 2.

FPCs engage in a range of activities from procurement of inputs, marketing of products, and post-harvest aggregation to value-addition pursuits, like food processing and packaging. Most of the FPCs deal in more than one agricultural commodity. Vegetables and fruits are primarily produced, while there is engagement in food grains, dairy, and apiculture also. Based on corporate disclosures, Agrizone FPCL (AzFPCL) and Punjab Organic Vegetable and Fruits PCL (POVFPCL) explicitly deal in organic produce. Furthermore, Rupnagar Farmer PCL is engaged in aggregating and supplying agro-waste and biomass to the Ambuja Cements Limited plant at Rupnagar. It has also been adjudged the best FPO in Punjab twice in 2019-20 and 2020-21 by NABARD.<sup>14</sup>

<sup>13</sup> Registrar of Companies, Chandigarh is the governmental authority for registration and regulation of Limited Companies and Limited Liability Partnership (LLP) in the states of Punjab, Chandigarh and Himachal Pradesh.

<sup>14</sup> <https://www.ambujacementfoundation.org/blog/rupnagar-producer-company-wins-best-fpo-in-punjab-again>

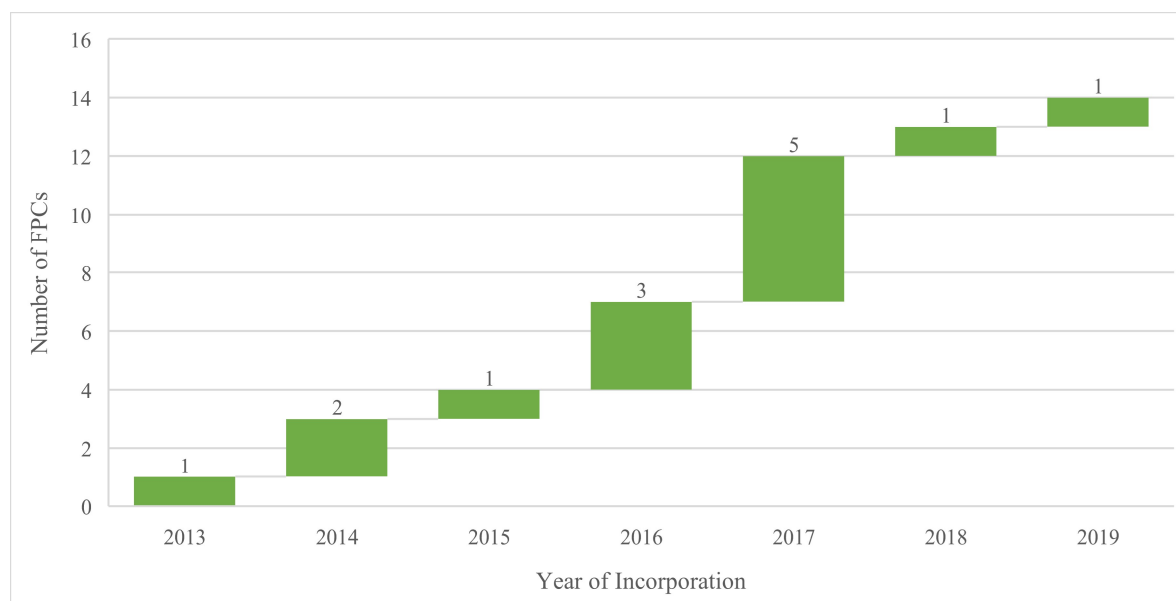
**Table 3 A Brief Profile of the FPCs**

Details	AFPCL	AzFPCL	AkFPCL	BFPCL	BhFPCL	CFPCL	DGPCL	FSVPC	GFFPCL	KFPCL	NFPCL	POVFPCL	RFPCL	SFPCL
Registration No.	46284	48530	46054	38514	45281	49326	39453	38781	45907	40208	46043	46163	37298	46177
Incorporation Date (years)	March 24 2017	October 16 2018	January 24 2017	March 21 2014	May 5 2016	April 11 2019	May 13 2015	July 28 2014	December 5 2016	March 23 2016	January 19 2017	February 21 2017	April 3 2013	February 28 2017
Business Activity	Marketing	Procurement, processing, and marketing	Value addition	Input supply and sales	Aggregation and marketing	Procurement and marketing	Procurement	Procurement and marketing	Marketing	Aggregation and marketing	Processing	Marketing	Input sales, aggregation and procurement	Marketing
Commodity	Potato, potato seed, vegetables	Vegetables and fruits, organic products	NS	Seed and wheat	Vegetables and dairy	NS	Maize, paddy, wheat, and foodgrains	Vegetables and tomato	Vegetables, onion-garlic paste, onion and food products	Vegetables and dairy	Honey, apiculture, and pollen	Vegetables, fruit, organic vegetables, and tomato	Seeds, fertilisers, pesticides, insecticides, agro waste, biomass	Others, food products, grocery products foodgrains
Resource Institution	Vegetable Grower Association of India	Mahila Kalyan Samiti	Vegetable Grower Association of India	Ambuja Cement Foundation	Skill Upgradation Training Services	Progressive Youth Forum	Suraksha Agricultural and Rural Development Society	ITSL; Suraksha Agricultural and Rural Development Society	Vegetable Grower Association of India	Skill Upgradation Training Services	Vegetable Grower Association of India	Vegetable Grower Association of India	Ambuja Cement Foundation	Vegetable Grower Association of India
No. of Shares	10,000	1,00,000	10,000	50,000	10,000	50,000	10,000	10,000	10,000	10,000	10,000	10,000	50,000	10,000
Authorised Capital (in ₹)	1,00,000	10,00,000	1,00,000	5,00,000	100,000	5,00,000	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000	5,00,000	1,00,000
No. of equity shareholders	10	10	10	10	11	10	10	10	10	12	5	5	252	10
No. of equity shareholders holding more than 5% shares	10	10	10	10	11	10	10	10	10	12	5	5	10	10
No. of directors	5	5	5	6	5	6	6	6	8	5	5	5	8	5
No. of related parties	5	NS	5	NS	5	Nil	Nil	Nil	5	NS	5	5	Nil	3
Independent auditor's opinion	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO	UO

**Note:** NS stands for 'not specified'; ITSL is International Traceability Systems Ltd.; UO is the unqualified opinion that states that the financial statements fairly reflect the company's financial results and financial position.

**Source:** Financial statements filed by FPCs with the Ministry of Corporate Affairs.

**Figure 2** Year-wise Incorporation of FPCs in Punjab



**Source:** Depiction by Gill.

The Department of Agriculture and Cooperation, through the SFAC, is providing support to FPCs through empanelled qualified Resource Institutions, such as International Traceability Systems Ltd.<sup>15</sup> Similarly, the NABARD, Ambuja Cement Foundation, and various self-help groups are providing requisite support to collectivise farmers to increase farmer incomes; thus, strengthening their sustainable agriculture-based livelihoods. These institutions provide training, capacity building, and networking platform to link with input suppliers, technology providers and market facilitators. Skill Upgradation Training Services is under the aegis of MANAGE-Punjab. Institutions like the Vegetable Growers Association of India, Mahila Kalyan Samiti, Progressive Youth Forum, and Suraksha Agricultural and Rural Development Society are non-profit organisations. Ambuja Cement Foundation is the corporate social responsibility (CSR) arm of Ambuja Cements Limited.<sup>16</sup>

The sample FPCs were incorporated as private companies limited by shares with an authorised share capital of ₹1,00,000, except Bathinda Farmer Producer Company Limited (BFPCL) and Chungal Farmer Producer Company Limited (CFPCL) with a capital of ₹5,00,000 each. Except for Rupnagar Farmer PCL, with 252 shareholders, all other FPCs have concentrated ownership ranging between 5-12 shareholders. The average number of directors is six, with primarily founding farmer producers holding this position (Annexure 1). The

<sup>15</sup> <http://sfacindia.com/PDFs/EmpanelledRIS/List%20of%20empanelled%20RIs%20Punjab%20State.pdf?var=9958569.25855>

<sup>16</sup> <https://www.ambujacement.com/Sustainability/Corporate-social-responsibility>



representation of females as directors is in only four out of the 15 FPCs. The number of related party relationships, i.e., parties with whom they are familiar or have a common interest, ranges between zero to five. The external auditor's opinion on the quality and accuracy of the financial statements prepared by a company is unqualified, i.e., fairly reflecting the company's financial results and financial position.

## **5 Financial Performance of FPCs**

The audited financial statements of fourteen active FPCs were scanned to evaluate the financial performance of FPCs in Punjab for FY2019 and FY2020 (Annexure B). Twenty-three financial ratios have been analysed, representing five performance measures.

### ***5.1 Preliminary analysis of financial statements***

The comparative financial statement analysis has been carried out by reviewing consecutive balance sheets and income statements for FY2019 and FY2020. As shown in Table 4, a year-to-year change analysis presents changes in absolute rupee amounts and percentages. Such an analysis provides a meaningful analysis over a relatively shorter period. Further, the yearly amounts have also been compared with the mean values of all the FPCs.<sup>17</sup> On average, the notable change in the balance sheet items shows an increase in reserves and surplus (44.55%), while showing a fall in long- (42.59%) and short-term (9.44%) borrowings, trade payables (46.21%), and receivables (20.29%). For assets, there is an increase in fixed assets (14.88%), inventories (6.48%), as well as cash and cash equivalents (12.01%). For the income statement, the mean values of revenues (45.93%) and purchases (1,043.87%) have increased. The average expenses, such as the cost of materials consumed (12.77%), employee benefit expenses (50.74%), finance costs (160.05%), and depreciation and amortisation expenses (7.88%), have increased. The mean earnings before tax (EBT) stands at ₹37,850 million in FY2020, an increase of 3331.23 per cent. There is a substantial increase in earnings after tax from a reported loss of ₹3,353 in FY2019 to a profit of ₹36,156 in FY2020.

The performance of the sample FPCs varied considerably for reported results. There was an increase in the paid-up share capital of only one producer company, RFPCL, from ₹1,00,000 to ₹2,33,900. Reserves and surpluses were built by AzFPCL, BFPCL, BhFPCL, KFPCL, NFPCL, POVFPCL, and RFPCL. Long-term borrowings taken by two FPCs, viz., FSVPC (26%) and RFPCL (49.28%), were paid off partially. At the same time, BhFPCL,

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<sup>17</sup> The comparative financial results of CFPCL are not available for FY2019. Further comparative income statements are not available for DGPCL.

**Table 4** Comparative Financial Position and Results of FPCs (FY2019-FY2020)

	Mean		AFPCL		AzFPCL		AkFPCL		BFPCL	
	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)
<i>Panel A: Balance Sheet Items (as at March 31 in ₹)</i>										
Paid Up Share Capital	48761.54	48.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reserves & Surplus	33374.77	44.55	2,634.58	-9.33	2,05,796.00	-587.99	3,115.56	-20.71	1,27,111.00	147.50
LT Borrowings	-22811.54	-42.59	–	–	–	–	–	–	–	–
Deferred Tax Liabilities	357.69	Undefined	–	–	–	–	–	–	–	–
ST Borrowings	-1923.08	-9.44	–	–	–	–	–	–	0.00	0.00
Trade Payables	-24774.00	-46.21	–	–	–	–	–	–	1,10,656.00	246.16
Other Payables	3076.92	Undefined	–	–	40,000.00	Undefined	–	–	–	–
Other Current Liabilities <sup>a</sup>	1211.46	2.65	0.00	0.00	–	–	1,000.00	11.11	12,780.00	163.87
ST Provisions	-45842.38	-30.82	–	–	–	–	–	–	12,000.00	76.19
Fixed Asset	12133.69	14.88	–	–	97,750.00	–	–	–	52,495.00	148.88
LT Loans & Advances	-118.00	-5.99	–	–	–	–	–	–	–	–
Other Non-Current Assets <sup>b</sup>	1575.32	23.85	-4,600.00	-33.33	–	–	-4,600.00	-33.33	–	–
Inventories	1982.38	6.48	–	–	1,15,369.00	Undefined	–	–	10,877.00	643.23
Trade Receivables	-18602.62	-20.29	–	–	–	–	–	–	2,02,910.00	73.87
Cash & Cash Equivalents	16190.90	12.01	7,234.58	10.80	32,677.00	50.27	15,515.56	21.15	-25,993.00	-69.51
ST Loans & Advances	-173.76	-3.86	–	–	–	–	-6,800.00	-100.00	–	–
Other Current Assets	11814.38	73.75	–	–	–	–	–	–	22,258.00	535.31
<i>Panel B: Profit and Loss Items (for the year ended in ₹)</i>										
Revenue from Operations <sup>c</sup>	1392580.00	45.93	6,000.00	6.67	17,22,902.00	Undefined	-15,080.00	-7.99	12,86,329.00	82.52
Other Income	-299256.42	-100.00	–	–	85,000.00	Undefined	–	–	95,943.00	39.04
Purchases	1917126.10	1,043.87	–	–	9,57,319.00	Undefined	–	–	12,89,006.00	87.01
Cost of materials consumed	7607.83	12.77	–	–	–	–	–	–	–	–
Changes in Stock-in-Trade	-667578.42	-25.22	–	–	–	–	-6,200.00	-8.16	-54,769.00	-124.78
Employee Benefit Expenses	38067.33	50.74	–	–	4,80,000.00	Undefined	–	–	-19,961.00	-14.23
Finance Costs <sup>d</sup>	1530.48	160.05	4,790.84	154.32	–	–	-82.83	-21.39	2,425.00	99.79
Administrative Expenses	2262.25	Undefined	–	–	27,147.00	Undefined	–	–	–	–
D & A Expenses <sup>e</sup>	1165.82	7.88	–	–	21,602.89	Undefined	–	–	-1,767.00	-7.76
Other Expenses <sup>f</sup>	-181751.11	-100.00	220.00	0.26	81,037.00	-231.53	-9,800.00	-8.88	-7,553.00	-4.68
EBITDA	36016.00	187.74	989.16	60.12	2,27,399.00	Undefined	1,002.83	47.47	1,73,123.00	-692.30
EBT	36746.46	3,331.23	989.16	60.12	2,40,796.00	-687.99	1,002.83	47.47	1,74,890.00	-366.04
Tax	-2762.75	-61.99	–	–	–	–	–	–	–	–
EAT	39509.21	-1,178.21	989.16	60.12	2,40,796.00	-687.99	1,002.83	47.47	1,74,890.00	-366.04
Basic & Diluted EPS	3.54	-1,501.06	0.10	62.50	24.08	-688.00	0.10	47.62	18.00	-360.00

	BhFPCL		DGPCL		FSVPC		GFFPCL	
	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)
<b>Panel A: Balance Sheet Items (as at March 31 in ₹)</b>								
Paid Up Share Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Reserves & Surplus	648.00	1.42	–	–	-13,701.00	-11.52	36,961.50	-43.48
LT Borrowings	–	–	–	–	-52,000.00	-26.00	–	–
Deferred Tax Liabilities	–	–	–	–	–	–	–	–
ST Borrowings	–	–	–	–	–	–	–	–
Trade Payables	–	–	–	–	–	–	–	–
Other Payables	–	–	–	–	–	–	–	–
Other Current Liabilities <sup>a</sup>	-2,49,255.00	-84.71	-11,631.00	-10.60	10,000.00	24.98	13,800.00	153.33
ST Provisions	–	–	–	–	–	–	–	–
Fixed Asset	–	–	0.00	0.00	-35,374.00	-24.48	–	–
LT Loans & Advances	–	–	–	–	–	–	–	–
Other Non-Current Assets <sup>b</sup>	–	–	6,439.20	14.98	–	–	-4,600.00	-33.33
Inventories	–	–	–	–	–	–	–	–
Trade Receivables	–	–	–	–	64,937.00	Undefined	–	–
Cash & Cash Equivalents	-2,48,607.00	-56.50	-20,611.30	-35.62	-1,08,548.00	-40.83	55,361.50	542.76
ST Loans & Advances <sup>c</sup>	–	–	4,541.10	17.02	0.00	0.00	–	–
Other Current Assets	–	–	–	–	23,284.00	98.72	–	–
<b>Panel B: Profit and Loss Items (for the year ended in ₹)</b>								
Revenue from Operations <sup>d</sup>	4,00,500.00	2,715.25	–	–	2,13,65,763.03	Undefined	98,250.00	Undefined
Other Income	-4,64,000.00	-100.00	–	–	5,10,451.00	192.64	–	–
Purchases	–	–	–	–	2,13,65,763.03	Undefined	37,800.00	Undefined
Cost of materials consumed	–	–	–	–	–	–	–	–
Changes in Stock-in-Trade	–	–	–	–	–	–	–	–
Employee Benefit Expenses	-13,870.00	-4.52	–	–	–	–	–	–
Finance Costs <sup>e</sup>	-908.00	-100.00	–	–	–	–	88.50	Undefined
Administrative Expenses	–	–	–	–	–	–	–	–
D & A Expenses <sup>f</sup>	–	–	–	–	0.00	0.00	–	–
Other Expenses <sup>g</sup>	-48,651.00	-28.61	–	–	5,01,573.94	198.89	-31,700.00	-57.53
EBITDA	-71.00	-9.87	–	–	8,877.06	69.37	92,061.00	-167.08
EBT	-71.00	-9.87	–	–	8,877.06	-39.32	92,061.00	-167.08
Tax	–	–	–	–	–	–	–	–
EAT	-71.00	-9.87	–	–	8,877.06	-39.32	92,061.00	-167.08
Basic & Diluted EPS	-0.01	-14.29	–	–	0.89	-39.38	9.21	-167.15

	KFPCL		NFPCL		POVFPCL		RFPCL		SFPCL	
	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)	Change (₹)	Change (%)
<b>Panel A: Balance Sheet Items (as at March 31 in ₹)</b>										
Paid Up Share Capital	0.00	0.00	0.00	0.00	0.00	0.00	1,33,900.00	133.90	0.00	0.00
Reserves & Surplus	820.00	13.70	1,792.78	75.39	12,582.34	2.59	70,309.00	16.18	-14,197.70	33.03
LT Borrowings	-	-	-	-	-	-	-2,44,550.00	-49.28	-	-
Deferred Tax Liabilities	-	-	-	-	-	-	4,650.00	Undefined	-	-
ST Borrowings	-	-	-	-	-	-	-	-	-25,000.00	-15.16
Trade Payables	-4,000.00	-57.14	-	-	-	-	-4,28,718.00	-66.47	-	-
Other Payables	-	-	-	-	-	-	-	-	-	-
Other Current Liabilities <sup>a</sup>	-	-	9,560.00	2,172.73	2,14,908.00	Undefined	32,587.00	1,174.31	-20,500.00	-18.12
ST Provisions	-	-	-	-	30,000.00	300.00	-6,37,951.00	-33.43	-	-
Fixed Asset	-	-	-14,558.00	-45.07	-7,465.00	-8.66	1,07,194.00	29.59	-57,804.00	-18.10
LT Loans & Advances	0.00	0.00	-	-	-	-	-1,534.00	-100.00	-	-
Other Non-Current Assets <sup>b</sup>	-	-	-	-	-	-	-	-	-	-
Inventories	-	-	-1,500.00	-100.00	24,500.00	Undefined	-1,11,975.00	-29.23	-11,500.00	-100.00
Trade Receivables	-	-	-	-	2,12,346.00	Undefined	-7,22,027.00	-78.74	-	-
Cash & Cash Equivalents	-1,180.00	-1.74	27,410.78	39.72	28,109.34	5.51	-19,654.00	-23.14	9,606.30	223.21
ST Loans & Advances <sup>c</sup>	-	-	-	-	-	-	-	-	-	-
Other Current Assets	-2,000.00	-9.52	-	-	-	-	1,10,045.00	68.98	-	-
<b>Panel B: Profit and Loss Items (for the year ended in ₹)</b>										
Revenue from Operations <sup>d</sup>	-3,39,680.00	-78.09	1,33,870.00	38.71	2,79,974.00	38.27	-81,61,755.00	-24.78	-66,113.00	-84.58
Other Income	-	-	-45,500.00	-38.24	-	-	-21,53,953.00	-96.88	-44,790.00	-16.35
Purchases	-2,40,980.00	-75.55	-3,54,530.00	-100.00	-	-	-	-	-48,864.80	-100.00
Cost of materials consumed	-	-	-	-	91,294.00	12.77	-	-	-	-
Changes in Stock-in-Trade	-	-	1,500.00	Undefined	-	-	-79,44,972.00	-25.12	-6,500.00	-36.11
Employee Benefit Expenses	-69,000.00	-91.39	15,000.00	25.00	1,40,000.00	Undefined	-75,361.00	-34.04	-	-
Finance Costs <sup>e</sup>	-	-	-36.78	-38.31	-	-	12,089.00	265.75	-	-
Administrative Expenses	-	-	-	-	-	-	-	-	-	-
D & A Expenses <sup>f</sup>	-	-	8,858.00	155.40	68.00	0.92	-49,367.00	-59.39	34,595.00	149.06
Other Expenses <sup>g</sup>	-25,500.00	-71.83	98.78	5.83	28,710.44	171.69	-1,48,286.00	-14.54	-1,06,556.30	-54.17
EBITDA	-4,200.00	-83.67	8,956.78	121.14	20,125.12	-25,874.42	-1,47,089.00	-51.05	51,018.10	-688.34
EBT	-4,200.00	-83.67	98.78	5.83	19,901.56	-271.91	-1,09,811.00	-54.78	16,423.10	-53.63
Tax (Current + Deferred)	-	-	-	-	-	-	-33,153.00	-61.99	-	-
EAT	-4,200.00	-83.67	98.78	5.83	19,901.56	-271.91	-76,658.00	-52.16	16,423.10	-53.63
Basic & Diluted EPS	-0.42	-84.00	0.05	38.46	0.53	72.60	-11.69	-79.52	1.64	-53.59

**Notes:** The financial statements have been prepared and presented in accordance with Indian GAAP under historical cost conventions; the comparative financial results of CFPL are not available for FY2019, and income statements are not available for DGPCL.

<sup>a</sup> Audit fee/professional fee payable; <sup>b</sup> Preliminary expenses written off; <sup>c</sup> Loans and advances given to related parties, IGST/CGST/SGST recoverable; <sup>d</sup> Sales or income from services; <sup>e</sup> Bank charges; <sup>f</sup> Rate of depreciation on plant and machinery @ 18.10%, DSR machine @15%, Furniture & Fittings @ 10%; <sup>g</sup> Payment to auditors, printing and stationary, professional expenses, preliminary expenses, telephone and electricity expenses, seed expense, other fees, taxes, etc.

DGFPCL, KFPCL, RFPCL, and SFPCL reported a fall in short-term liabilities (i.e., short-term borrowings, trade and other payables, and other current liabilities) during FY2020. AzFPCL, BFPCL and RFPCL reported higher fixed assets. A fall is reported in inventories by NFPCL, RFPCL, and SFPCL, in trade receivables by RFPCL and other current assets by KFPCL. The cash and cash equivalent position has been consolidated by AFPCL, AzFPCL, AkFPCL, GFFPCL, NFPCL, POVPC, and SFPCL. Relative negative revenue of operations has been reported by AkFPCL (7.99%), KFPCL (78.09%), RFPCL (24.78%), and SFPCL (84.58%). Similarly, a fall in purchases was seen for KFPCL, NFPCL, and SFPCL. Fall in stock-in-trade (AkFPCL, BFPCL, RFPCL, and SFPCL), employee benefit expenses (BFPCL, BhFPCL, and KFPCL), finance costs (BhFPCL and NFPCL), depreciation and amortisation expenses (RFPCL), and other expenses (AkFPCL, BFPCL, BhFPCL, GFFPCL, KFPCL, RFPCL, SFPCL) have been seen. The earnings after tax are a mixed bag, with FPCs reporting an increase in profits (AFPCL, AkFPCL, and NFPCL), a fall in profits (BhFPCL, KFPCL, and RFPCL), a turnaround from losses to profits (AzFPCL, BFPCL, and GFFPCL), and reduced losses (FSVPCL and SFPCL).

Overall, in line with the average values of balance sheet and income statement items, they have limited financing capacity since the FPCs are in the emerging and growing phase. The capital has been primarily raised through equity. None of the producer companies, except for two, have long-term debt. Further, there is a relative decline in long- and short-term borrowings as well as trade payables. Though there is an average increase in revenue from operations, extremely positive and negative changes were observed. Except for three FPCs, the comparative earnings after taxes have increased from FY2019 to FY2020.

## *5.2 Ratio analysis*

As apparent from the preliminary analysis, the extremity of financial numbers requires careful consideration of certain aspects of a company's economically important relationships. Several ratios can be calculated using a company's financial statement. Both descriptive and cross-sectional computation of ratios provides valuable information about comparative performance. The descriptive statistics of financial ratios are presented in Table 5. Due to extreme values, the minimum, maximum and mean values were winsorised at ten per cent. Further, quartile one (Q1), quartile two (Q2), and quartile three (Q3) provide the lower, middle, and higher bound for the ratios (Risk Management Association, 2018).

The mean (median) values of profitability ratios are 39 per cent (20%) for gross profit and one per cent (1%) for net profit margins. The mean (median) earnings per share -0.05 (0.17)

**Table 5** Descriptive Statistics of Sample FPCs

Ratios	Minimum	Maximum	Mean	Winsorised Minimum	Winsorised Maximum	Winsorised Mean	Standard Deviation	Q1	Q2	Q3
<b>Panel A: Profitability Ratios</b>										
Gross Margin (%)	-3.00	100.00	39.00	-3.00	100.00	39.00	40.00	4.00	20.00	81.00
Operating Margin (%)	-118.00	38.00	-4.00	-3.00	5.00	1.00	29.00	0.00	1.00	3.00
Pre-tax Profit Margin (%)	-118.00	38.00	-4.00	-3.00	5.00	1.00	29.00	0.00	1.00	3.00
Net Margin (%)	-118.00	38.00	-4.00	-3.00	5.00	1.00	29.00	0.00	1.00	3.00
EPS (₹)	-5.51	20.58	1.53	-3.51	3.70	-0.05	6.13	-1.40	0.17	1.00
Operating Cash Flow to Income (times)	-383.65	460.20	19.723	-383.65	460.20	19.723	345.17	-191.64	1.18	231.10
<b>Panel B: Return on Invested Capital</b>										
Return on Assets (times)	-0.05	1.10	0.56	-0.05	0.05	0.01	0.34	0.00	0.02	0.05
Return on Equity (times)	-0.28	1.23	0.20	-0.06	0.02	0.02	0.44	0.00	0.02	0.11
Return on Invested Capital (times)	-0.28	1.23	0.20	-0.05	0.10	0.02	0.44	0.00	0.02	0.10
<b>Panel C: Asset Utilization and Efficiency Ratios</b>										
Cash Turnover (times)	0.00	329.92	41.90	0.00	21.18	3.55	91.39	1.32	2.04	21.18
Inventory Turnover (times)	2.10	639.64	204.84	2.10	639.64	204.84	256.95	29.87	79.17	399.07
Days of Inventory (days)	0.00	182.50	39.85	0.00	21.99	4.19	75.48	0.00	2.99	21.99
Working Capital Turnover (times)	-28.60	82.39	7.42	-0.05	15.24	4.18	23.79	0.00	2.15	6.13
Fixed Asset Turnover (times)	0.00	168.50	37.90	0.00	59.57	21.57	33.52	0.02	19.17	52.92
Total Asset Turnover (times)	0.00	49.55	6.65	13.10	0.00	9.17	2.34	0.86	1.60	5.85
<b>Panel D: Liquidity Ratios</b>										
Cash (x:1)	0.02	1.00	0.73	0.02	1.00	0.73	0.35	0.53	0.92	1.00
Quick (x:1)	0.02	183.66	19.65	0.02	12.70	4.12	45.785	1.13	3.60	8.91
Current (x:1)	0.06	183.66	19.91	0.016	12.70	4.57	46.15	1.13	4.79	8.91
<b>Panel E: Capital Structure and Solvency</b>										
Total Debt to Total Assets (times)	0.00	0.85	0.33	0.00	0.85	0.33	0.29	0.09	0.30	0.52
Total Debt to Equity (times)	0.00	5.71	1.08	0.00	2.41	0.55	1.66	0.10	0.43	1.10
Long-term Debt to Equity (times)	0.00	0.93	0.10	–	–	–	0.27	0.00	0.00	0.00
Financial Leverage (times)	1.00	6.71	2.08	1.00	3.41	1.55	1.66	1.10	1.43	2.10

**Note:** Based on the financial statements have been prepared and presented following Indian GAAP under historical cost conventions.

indicates shareholder wealth erosion. For every rupee of assets the company invests in, the return on average is one paise in net profit per year. Similarly, the mean return is two paise for equity and invested capital. The effectiveness of a company in its use of total assets, fixed assets, cash, and working capital to generate sales is on average (median) 9.17 (1.60), 21.57 (19.17), 3.55 (2.04), and 4.18 (2.15) times, respectively. The inventory level maintained by FPCs is very low relative to revenues resulting in a median inventory turnover of 79 times. The average cash, quick, and current ratios are correspondingly 0.73, 4.12, and 4.57. The total debt to equity and total assets is on average (median) 0.55 (0.43) and 0.33 (0.30) times, reflective of low total debt in the capital structure. When calculated with long-term debt in the numerator, the same metric gives a mean and median of only 0.10 and zero. At the same time, the mean total assets to equity are 1.55 times.

The descriptive statistics provide benchmarks for the cumulative ratios of the sample FPCs. Thus, they only allow making summations about the financial performance of FPCs. In contrast, the standalone cross-sectional analysis provides a clearer perspective about each FPC relative to its peers and benchmarks. Further, observing a change from FY2019 to FY 2020 provides temporal information required to study the flux in business results. The comparative ratio computations for the fourteen FPCs are presented in Table 6.

The profitability ratios have been calculated to determine the operating efficiency, profitability, and growth of the FPCs. The gross profit margin of AFPCL, BhFPCL, and NFPCL is a hundred per cent in FY2020, which is unfeasible for any producer company. Rather for NFPCL, the gross margin is negative (-2.51%) in FY2019, as seen in Figure 3. Usually, a gross profit margin ratio of 50 to 70 per cent is considered healthy for manufacturers, other producers of goods, and retailers. Further, these FPCs have not disclosed their cost of goods sold (NFPCL is in processing activities) or cost of sales (AFPCL and BhFPCL are in aggregation and marketing activities). Their net profit margin for the same period is 2.74 per cent, 0.16 per cent, and 0.37 per cent, respectively. The gross margins for GFFPVL (61.53%), AkFPCL (59.82%), AgFPCL (44.44%), and POVFPCL (20.31%) are above the composite median. The remaining FPCs are underperforming and could not generate sufficient profits over revenue from operations. Again, the net profit margins for GFFPCL (37.62%) and AgFPCL (11.94%) show efficiency in converting sales into profits. Further, BFPCL has 'other sources of income,' which resulted in higher net profit margins in FY2020. SFPCL reported whopping negative net profit margins in FY 2020 (-117.82%) and FY 2019 (-39.18%) due to insufficient revenues, large purchases, and indirect expenses.

**Table 6** Ratio Analysis of Sample FPCs

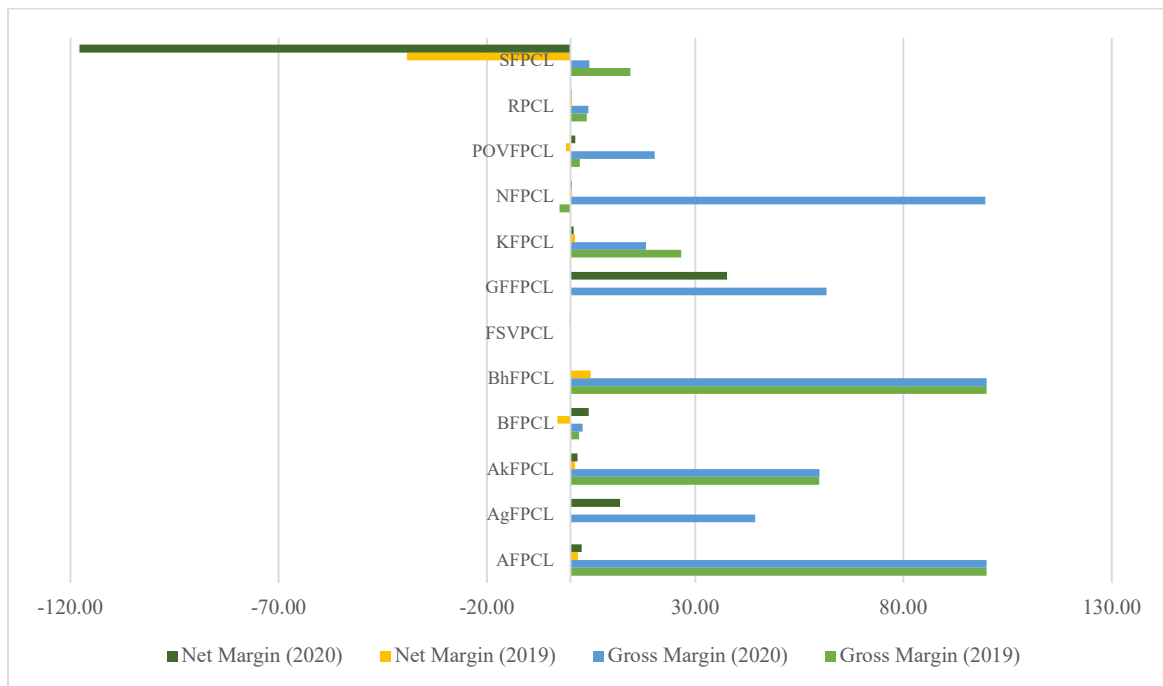
Ratios	AFPCL		AgFPCL		AkFPCL		BFPCL		BhFPCL		CFPCL		DGPCL	
	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019
<b>Panel A: Profitability Ratios</b>														
Gross Margin (%)	100.00	100.00	44.00	–	60.00	60.00	3.00	2.00	100.00	100.00	–	–	–	–
Operating Margin (%)	3.00	2.00	12.00	–	2.00	1.00	4.00	-3.00	0.00	5.00	–	–	–	–
Pre-tax Profit Margin (%)	3.00	2.00	12.00	–	2.00	1.00	4.00	-3.00	0.00	5.00	–	–	–	–
Net Margin (%)	3.00	2.00	12.00	–	2.00	1.00	4.00	-3.00	0.00	5.00	–	–	–	–
EPS (₹)	0.26	0.16	20.58	-3.50	0.31	0.21	13.00	-5.00	0.06	0.07	–	–	–	–
Operating Cash Flow to Income (times)	–	–	–	–	–	–	0.37	1.99	-383.65	460.20	–	–	–	–
<b>Panel B: Return on Invested Capital</b>														
Return on Assets (times)	0.03	–	1.10	–	0.03	–	0.26	–	0.00	–	0.00	–	0.00	–
Return on Equity (times)	0.04	–	1.23	–	0.04	–	0.51	–	0.00	–	0.00	–	0.00	–
Return on Invested Capital (times)	0.04	–	1.23	–	0.04	–	0.51	–	0.00	–	0.00	–	0.00	–
<b>Panel C: Asset Utilization and Efficiency Ratios</b>														
Cash Turnover (times)	1.36	–	21.18	–	2.14	–	116.60	–	1.32	–	0.00	–	0.00	–
Inventory Turnover (times)	–	–	29.87	–	–	–	399.07	–	–	–	–	–	–	–
Days of Inventory (days)	–	–	21.99	–	0.00	–	0.94	–	–	–	–	–	–	–
Working Capital Turnover (times)	1.56	–	14.48	–	2.32	–	15.24	–	2.84	–	0.00	–	0.00	–
Fixed Asset Turnover (times)	–	–	35.25	–	–	–	46.26	–	–	–	0.00	–	0.00	–
Total Asset Turnover (times)	1.17	–	9.17	–	1.81	–	5.85	–	1.32	–	0.00	–	0.00	–
<b>Panel D: Liquidity Ratios</b>														
Cash (x:1)	1.00	1.00	0.46	1.00	1.00	0.92	0.02	0.12	1.00	1.00	1.00	–	0.54	0.68
Quick (x:1)	8.24	7.44	2.44	–	8.89	8.91	1.70	1.88	4.25	1.50	183.66	–	0.70	0.77
Current (x:1)	8.24	7.44	5.33	–	8.89	8.91	1.74	1.89	4.25	1.50	183.66	–	0.70	0.77
<b>Panel E: Capital Structure and Solvency</b>														
Total Debt to Total Assets (times)	0.11	0.11	0.13	0.00	0.10	0.10	0.49	0.48	0.24	0.67	0.00	–	0.50	0.52
Total Debt to Equity (times)	0.12	0.13	0.15	0.00	0.11	0.11	0.97	0.91	0.31	2.02	0.01	–	0.98	1.10
Long-Term Debt to Equity (times)	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Financial Leverage (times)	1.12	1.13	1.15	1.00	1.11	1.11	1.97	1.91	1.31	3.02	1.01	–	1.98	2.10



Ratios	FSVPCL		GFFPCL		KFPCL		NFPCL		POVFPCL		RPCL		SFPCL	
	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019
<b>Panel A: Profitability Ratios</b>														
Gross Margin (%)	0.00	–	62.00	–	18.00	27.00	100.00	-3.00	20.00	2.00	4.00	4.00	5.00	14.00
Operating Margin (%)	0.00	–	38.00	–	1.00	1.00	0.00	0.00	1.00	-1.00	0.00	1.00	-118.00	-39.00
Pre-tax Profit Margin (%)	0.00	–	38.00	–	1.00	1.00	0.00	0.00	1.00	-1.00	0.00	1.00	-118.00	-39.00
Net Margin (%)	0.00	–	38.00	–	1.00	1.00	0.00	0.00	1.00	-1.00	0.00	0.00	-118.00	-39.00
EPS (₹)	-1.37	-2.26	3.70	-5.51	0.08	0.50	0.18	0.13	1.26	0.73	3.01	14.70	-1.42	-3.06
Operating Cash Flow to Income (times)	–	–	–	–	–	–	–	–	–	–	–	–	–	–
<b>Panel B: Return on Invested Capital</b>														
Return on Assets (times)	-0.03	–	0.75	–	0.01	–	0.02	–	0.02	–	0.05	–	-0.05	–
Return on Equity (times)	-0.06	–	1.10	–	0.01	–	0.02	–	0.02	–	0.11	–	-0.28	–
Return on Invested Capital (times)	-0.05	–	1.10	–	0.01	–	0.02	–	0.02	–	0.09	–	-0.28	–
<b>Panel C: Asset Utilization and Efficiency Ratios</b>														
Cash Turnover (times)	100.97	–	2.59	–	1.42	–	5.80	–	1.93	–	329.92	–	1.32	–
Inventory Turnover (times)	–	–	–	–	–	–	639.64	–	82.58	–	75.76	–	2.10	–
Days of Inventory (days)	0.00	–	0.00	–	0.00	–	182.50	–	5.55	–	5.04	–	182.50	–
Working Capital Turnover (times)	82.39	–	4.47	–	1.16	–	6.13	–	1.98	–	-28.60	–	-0.05	–
Fixed Asset Turnover (times)	168.50	–	–	–	–	–	19.17	–	12.27	–	59.57	–	0.04	–
Total Asset Turnover (times)	49.55	–	1.99	–	0.86	–	4.42	–	1.39	–	15.59	–	0.04	–
<b>Panel D: Liquidity Ratios</b>														
Cash (x:1)	0.53	0.85	1.00	1.00	0.78	0.76	1.00	0.98	0.69	1.00	0.08	0.05	1.00	0.27
Quick (x:1)	5.88	7.86	2.88	1.13	28.58	12.70	9.64	156.86	2.95	51.03	0.35	0.45	0.06	0.02
Current (x:1)	5.88	7.86	2.88	1.13	28.58	12.70	9.64	160.27	3.04	51.03	0.53	0.60	0.06	0.06
<b>Panel E: Capital Structure and Solvency</b>														
Total Debt to Total Assets (times)	0.49	0.52	0.30	0.38	0.03	0.06	0.09	0.00	0.30	0.02	0.71	0.85	0.84	0.83
Total Debt to Equity (times)	0.96	1.10	0.44	0.60	0.03	0.07	0.10	0.00	0.43	0.02	2.41	5.71	5.43	4.88
Long-Term Debt to Equity (times)	0.72	0.91	–	–	–	–	–	–	–	–	0.34	0.93	–	–
Financial Leverage (times)	1.96	2.10	1.44	1.60	1.03	1.07	1.10	1.00	1.43	1.02	3.41	6.71	6.43	5.88

**Note:** Based on the financial statements have been prepared and presented in accordance with Indian GAAP under historical cost conventions.

**Figure 3** Comparative Gross and Net Profit Margins (%)

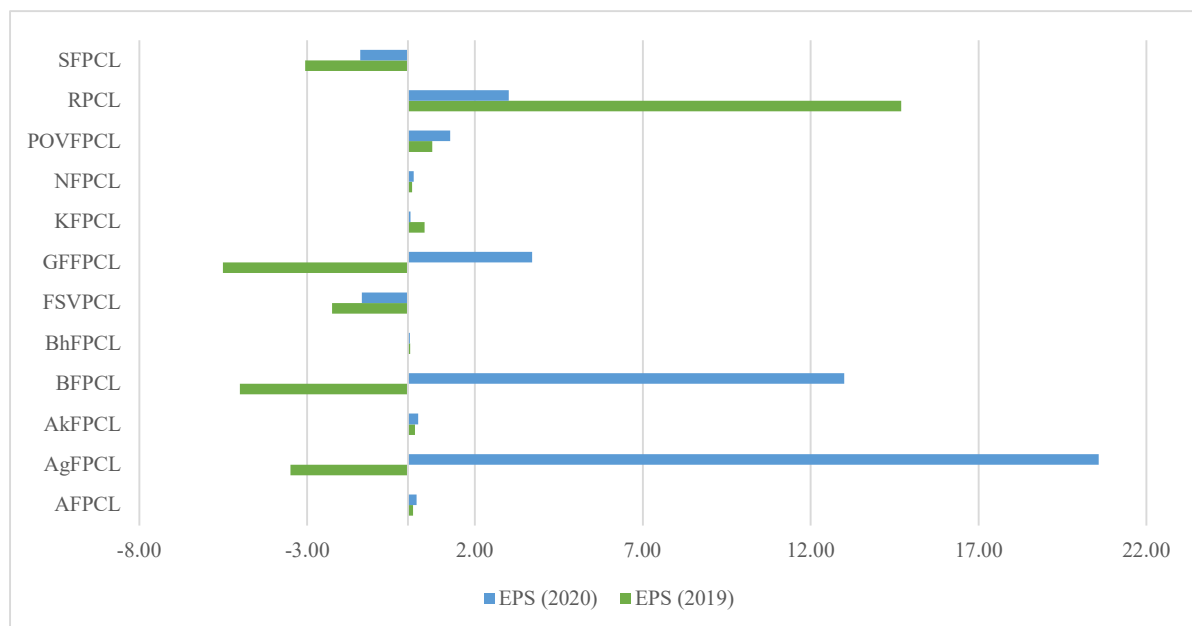


**Note:** Profitability ratios were not calculated for CFPCL and DGPCL due to insufficient data.

**Source:** Computations based on disclosures made in the financial statements.

The Earnings Per Share (EPS) is the slice of a company’s profit which is notionally available to a common shareholder. As apparent in Figure 4, the EPS of AgFPCL, BFPCL, and GFFPCL have significantly improved from -3.50, -5.00, and -5.51 in FY2019 respectively, to 20.58, 13.00, and 3.70 in FY2020. On the other hand, there is a drop in the EPS of BhFPCL, KFPCL,

**Figure 4** Comparative Earnings Per Share

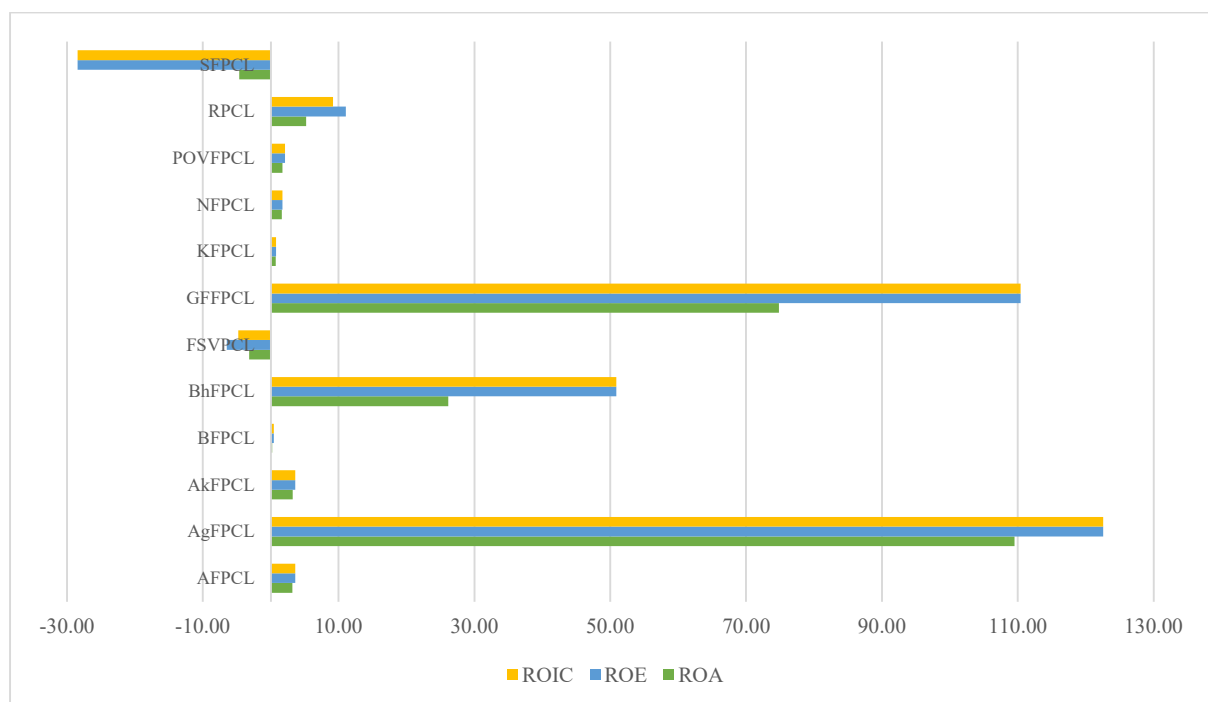


**Source:** Computations based on disclosures made in the financial statements.

and RPCL correspondingly by 0.01, 0.42, and 11.69 in FY 2020. FSVPCL and SFPCL have negative EPS consecutively over the two financial years, implying a loss in business activities. The remaining FPCs also demonstrate very low values of EPS. Based on the cash flow statement disclosures, the cash from operations to net income could be calculated only for BFPCL and BhFPL. If cash flow from operations are below net profit, it suggests that the FPC is either becoming increasingly aggressive in profit recognition through a higher level of accruals or experiencing deterioration. BFPCL and BhPCL report negative cash flows in FY2019 and FY 2020, respectively. While the operating cash flow to income for correspondingly other periods are 0.37 times and 460.20 times.

The return on investment (ROI) can be defined alternatively with the denominators being assets, equity or invested capital. Depending on the denominators, it would be how the numerators are construed. The ROI calculations for AgFPCL and GFFPCL are close or more than a hundred due to small denominators. This is primarily due to a lack of disclosures on fixed assets for calculating return on assets (ROA) or negative reserves and surplus for determining ROE and ROIC. Reasons for negative reserves and surplus include accumulated losses over time, depleted retained earnings, and excessive debt incurred to cover accrued losses. Only BhFPCL is reporting good returns on assets (26.16%), equity (50.90%), and invested capital (50.90%), as put forth in Figure 5. On the other extreme, FSVPCL and SFPCL

**Figure 5** Return on Investment Ratios (FY2020)



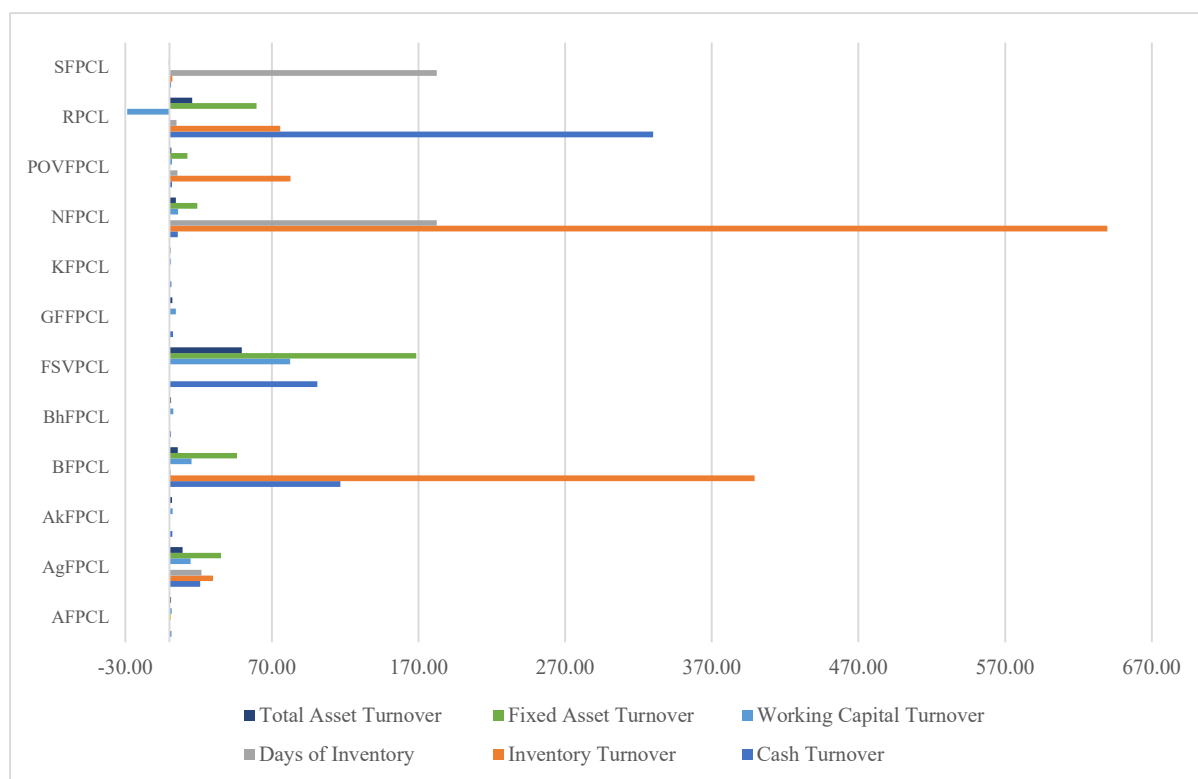
**Note:** ROIs were not calculated for CFPCL and DGPCL due to insufficient data.

**Source:** Computations based on disclosures made in the financial statements.

reported negative ROIs due to negative earnings after tax. All in all, low and negative margins and returns have been observed due to inadequate revenues or high operating and other costs. More serious concerns are deficient reporting and disclosures for these FPCs.

Asset utilisation and efficiency ratios are employed to evaluate how the FPCs manage and utilise their assets and resources to generate revenue from operations. These ratios indicate the speed at which the assets are converted into sales. BFPCL, FSVPCL, and RPCL have a whopping cash turnover ratio implying too low cash balance vis-a-vis sales, as depicted in Figure 6. On the other hand, AFPCL, BhFPCL, KFPCL, POVFPCL, and SFPCL have a ratio lower than the median (2.035), signalling idle cash. Only six FPCs hold inventories in their business, and all, except SFPCL, have a high turnover implying underinvestment in stock and/or alarming sales. Added, NFPCL and SFPCL have higher days of inventory on hand (182 days), suggesting slow-moving inventories. For others, the inventories are held between twenty-two days to one day. The working capital turnover ratios are higher for all bar RPCL and SFPCL, implying that producer companies generate tremendous sales compared to the money used to fund the sales. The fixed asset turnover for FSVPCL (168.50), RPCL (59.57), BFPCL (46.26), and AgFPCL (35.25) is above the median, implying effectiveness in the use

**Figure 6** Asset Utilisation and Efficiency Ratios (FY2020)



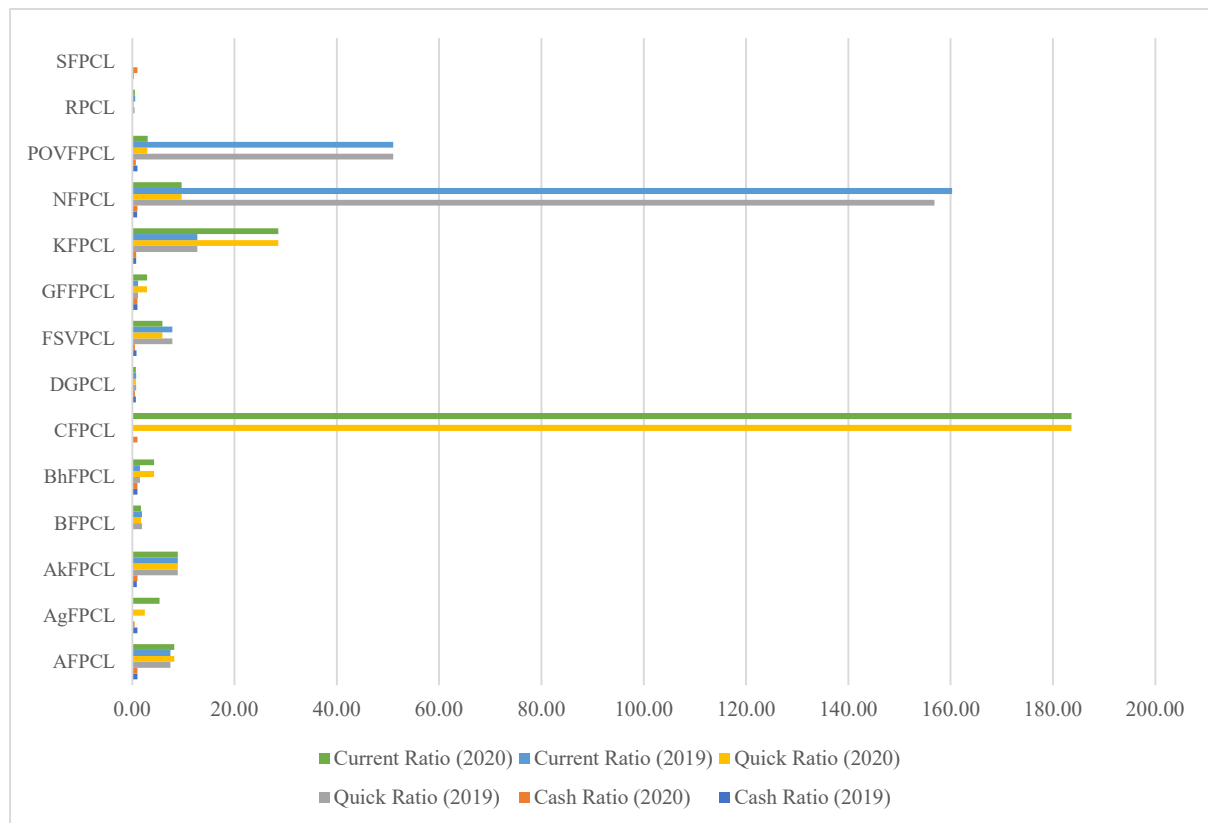
**Note:** Due to insufficient data, asset utilisation and efficiency ratios were not calculated for CFPCL and DGPCL.

**Source:** Computations based on disclosures made in the financial statements.

of fixed assets to generate revenues. These same FPCs, together with GFFPCL and AkFPCL, show higher than median total asset turnover indicating efficiency in using total resources in producing sales.

Liquidity ratios are analysed to measure the ability of the FPCs to measure the degree of current asset fungibility or meet their short-term obligations or current liabilities. Except for BFPCL and RFPCL, the cash and cash equivalents as a proportion to current assets show a very liquid position. The current ratio and its conservative version, i.e., quick ratio, is the same value for most of the FPCs as they do not hold inventories, as seen in Figure 7. Extremely high values of quick and current assets were observed for NFPCL in FY2019 and CFPCL in FY 2020. On further analysis, it was observed that they have negligible current liabilities but a very comfortable position of quick and current assets. On the other hand, SFPCL, RPCL, and DGPCL have maintained low current and quick assets relative to their short-term borrowings and current liabilities, confounding their ability to pay the debt immediately. Overall, higher liquidity ratios indicate a better liquidity position of the FPCs. However, extremely high values suggest that the accumulated current assets are not adequately utilised and lie idle. Instead, they should be put to some productive use or reinvested for returns.

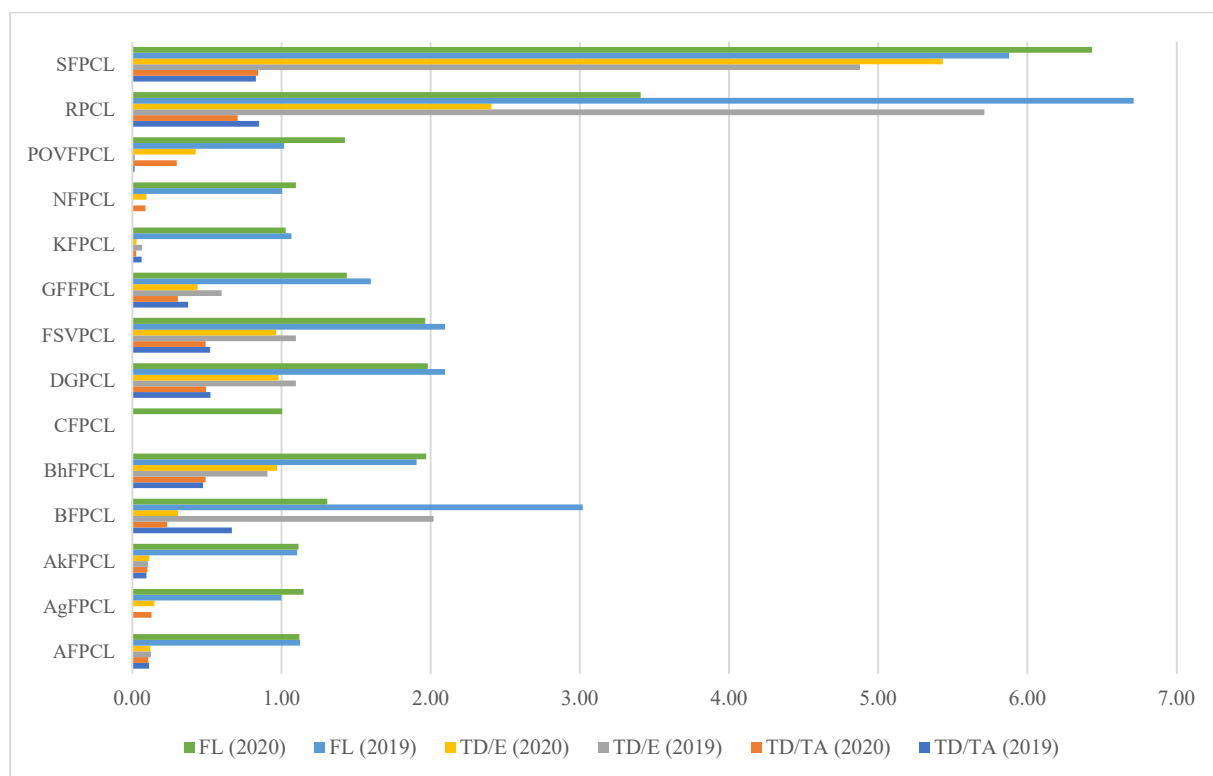
**Figure 7** Comparative Liquidity Ratios



**Source:** Computations based on disclosures made in the financial statements.

Capital structure refers to the sources of financing, which is primarily equity for the FPCs. Capital structure ratios relate components of capital structure to each other or their total. Due to the low proportion of debt (long- and short-term) to total assets (or capital), the ratios are below 1.0. As shown in Figure 8, the highest total debt to total assets is for RPCL (0.85 for FY2019 and 0.71 for FY2020) and SFPCL (0.83 for FY2019 and 0.84 for FY2020). However,

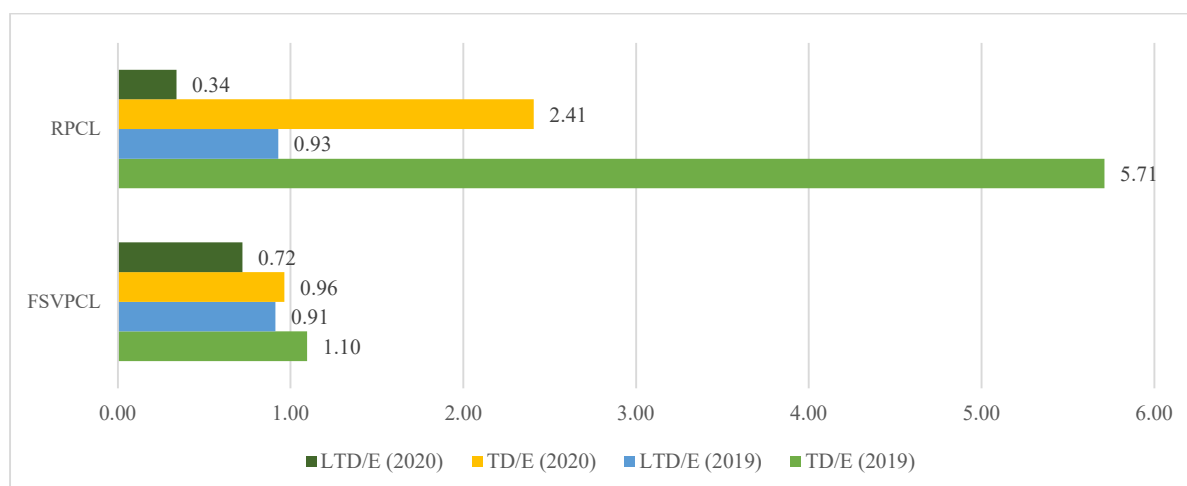
**Figure 8** Comparative Capital Structure and Solvency Ratios



**Source:** Computations based on disclosures made in the financial statements.

the total debt-to-equity ratio was higher than one for BFPCL, RPCL and SFPCL primarily due to heavy numerator (high long- and short-term borrowings, excessive other current liabilities, and short-term provisions) and light denominator (negative reserves and surplus). Added insight is provided by looking into total debt vis-à-vis long-term debt-to-equity ratios as presented in Figure 9. As discussed earlier, only two FPCs (FSVPCL and RPCL) have long-term debts on their balance sheets. The comparison shows that long-term debt is a very small proportion of the total debt for RPCL. AFPCL, AgFPCL, AkFPCL, CFPCL, KFPCL, NFPCL, and POVFPCL have lower financial leverage ratios reflecting a more significant proportion of assets financed by common equity capital. In other words, it can also be said that FPCs might face some challenges in raising debt from financial institutions due to a lack of collateral or complex documentation procedures.

**Figure 9** Comparative Total Debt to Equity Ratio and Long-Term Debt to Equity Ratios



**Source:** Computations based on disclosures made in the financial statements.

## 6 Conclusion and Recommendations

The concept of producer companies was proposed with the ‘win-win’ oxymoron. What is good for the business is also good for its members and other stakeholders. Further, formalised business structures are expected to spur new products and processes and adopt new technologies. However, the reconciliation of the economic viability with environmental and social good is typically overgeneralised. Businesses must use natural resources, finances, and human competencies astutely to implement the necessary changes. Then, any costs of change have to ultimately end up in price that has to be borne by the consumers and society at large. Therefore, a rigorous analysis of the revenue- and cost-side contributions to shareholder value needs to be conducted to determine whether businesses are sustainable. The research study is motivated by this stance and aims to demystify the financial performance of FPCs based out of Punjab for FY2019 and FY2020.

Due to a strong impetus by the central government, agencies like the SFAC and NABARD serve as the nodal agencies for mobilising and promoting FPCs leading to a spurt in their number. In addition, many states and self-help groups nurture the farmer-producer ecosystem. The corporatisation of cooperatives offers a unique ownership, management and governance structure, requiring compliance under the Companies Act, distinct from erstwhile collective models. Based on the experiences of Maharashtra, which has the highest number of FPCs in India, there is evidence that aggregation through producer companies result in increased price realisation, lower marketing cost, and net savings in input purchases.<sup>18</sup>

<sup>18</sup> <https://pib.gov.in/PressReleasePage.aspx?PRID=1739593>

The state of Punjab has been a laggard in implementing schemes and doling special incentives to promote FPOs. Preliminary evidence relating to the functioning and performance of FPOs in Punjab shows that the dairy sector is performing better than agri-businesses (Verma, 2020). Further, most producer companies deal in other than major foodgrains produced in Punjab, restricting their growth and endangering their viability. Several FPCs in Punjab are defunct due to non-compliances in reporting and filing compliance documents. Issues related to their shareholding pattern, the structure of the board of directors, and performance and viability remain largely unanswered.

The sample under study was restricted to only fourteen active FPCs that filed their most recent audited financial statements with the Registrar of Companies. The first FPC was incorporated in 2013, and the maximum got registered in 2017. Except for RFPCL, with 252 shareholders, all other FPCs have concentrated ownership ranging between 5 and 12. The average number of directors is six, with primarily founding farmer producers holding this position. Most of the FPCs deal in more than one agricultural commodity and engage in diverse activities from procurement of inputs, marketing of products, and post-harvest aggregation to value-addition pursuits, like food processing and packaging. In addition, a number of resource institutions are providing training, capacity building, and networking platform to link with input suppliers, technology providers and market facilitators, thus, strengthening their sustainable agriculture-based livelihoods.

The performance of the sample FPCs varied considerably for reported results. The comparative financial statement analysis shows that the FPCs have limited financing capacity with extremely positive and negative year-on-year changes in revenue from operations. The gross margins for GFFPVL, AkFPCL, AgFPCL, and POVFPCL are above the composite median. The remaining FPCs are underperforming and could not generate sufficient profits over revenue from operations. The net profit margins for only GFFPCL and AgFPCL show efficiency in converting sales into profits. Only BhFPCL reported good returns on assets, equity, and invested capital. All in all, low and negative margins and returns have been observed due to inadequate revenues or high operating and other costs. More serious concerns are deficient reporting and disclosures for these FPCs. Over 70 per cent of FPCs have idle cash, around 50 per cent hold inventories, and over 80 per cent show lower asset turnover indicating inefficiency in the use of resources in producing sales. Extremely high liquidity suggests that the accumulated current assets are not adequately utilised and lie idle. Due to the low proportion of debt to total assets (or capital), the capital structure ratios are below 1.0. Only two FPCs



(FSVPCL and RPCL) have long-term debts on their balance sheets, reflecting a significant proportion of assets by other FPCs being financed by common equity capital.

It is apparent from the shareholding pattern that the ownership is concentrated in the hands of a few individual investors. Further, these founding investors also retain the board of directors' seat. Thus, poor governance practices result in the board neither providing direction nor exercising control. Further, the founder-managers skills and abilities are abstruse since there are no disclosures regarding the same. Thus, there are personal conflicts with the founding members performing both the role of management and board. Evidence shows that insular management and ineffective governance structures damage business competitiveness (Burkart et al., 2003; Pérez-González, 2006). It is imperative that the role of the board and management be separated. The members need to be professionally trained to aggregate and market their products at competitive prices by incorporating effective business practices at par with other major brands regarding their products' packaging, branding, and positioning. The board of directors can have representatives drawn from diverse professions and expertise. Corporate websites should be maintained for complete, true and contemporaneous disclosures, disclosing a broad spectrum of information, including product range and marketing strategies.

All businesses need to find ways to continue producing economically valuable goods and services while reducing their ecological impact. The FPCs must assess the contribution business makes to shareholder value by reducing costs and enhancing revenues. Ideally, most companies use a combination of debt and equity in their capital structure. Debt financing enables maintaining ownership control with funds to leverage growth. The FPCs should tap funds to meet credit requirements through central government-dedicated schemes. Further, they must practise effective working capital management processes that yield substantial returns and reduce risks and costs. They need to diversify and not restrict themselves to a single product incorporating organics and items in the export list. Finally, the FPCs must contemplate beyond production, aggregation and profitability to establish a viable and sustainable enterprise. Organic foods, the demand for which has surged since the COVID-19 pandemic, is a sustainable area of operation. Healthy growth is expected to continue in the coming years as consumers associate organic foods with good health, nutrition and wellness. Further, year-on-year growth in the export of certain products which were traditionally grown in Punjab, such as organic processed food, oil seeds, cereals and millets, and pulses, has seen a manifold

increase.<sup>19</sup> A very critical area for investment is dairy which has a lot of potential to improve rural incomes and women empowerment.<sup>20</sup> Therefore, FPCs must continuously evolve and engage with farmers, customers, environmental groups, the public, and governments to stay abreast of the times.

From a policy perspective, the central government and its agencies have provided a conducive ecosystem to promote and support FPCs. However, the lackadaisical attitude of the State and lack of awareness amongst farmers has adversely affected the promotion and viability of FPCs. Further, under the Companies Act, every private company must file its financial statements in a prescribed format with the Registrar of Companies. However, the financial statements filed by FPCs fail to make complete and accurate disclosures. Therefore, the Ministry of Corporate Affairs should actively ensure compliance with disclosure norms giving a bolder push for business transparency. Higher standards of disclosure would enable superior supervision and incentivise improved internal governance.

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<sup>19</sup> <https://apeda.gov.in/apedawebsite/organic/data.htm>

<sup>20</sup> <https://www.fao.org/3/i0588e/i0588e05.htm>

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## ANNEXURE A

### Details of Directors

Name	Directors	Appointed on
Agaaz Farmer Producer Company Limited (AFPCL)	Jagjit Singh	March 24, 2017
	Sukhwinder Kaur	24 March, 2017
	Jasvir Singh	March 24, 2017
	Gurmeet Singh	May 15, 2018
	Santokh Singh Bal	May 15, 2018
Agrizone Farmer Producer Company Limited (AzFPCL)	Harsharan Singh	October 16, 2018
	Manbir Singh	October 16, 2018
	Gurinder Singh	October 16, 2018
	Satvir Singh	October 16, 2018
	Dharamjit Singh	October 16, 2018
Akal Farmer Producer Company Limited (AkFPCL)	Sukhwant Singh	January 24, 2017
	Gurleen Singh	January 24, 2017
	Harpreet Singh	January 24, 2017
	Balbir Singh	January 24, 2017
	Gurvinder Singh	January 24, 2017
Bathinda Farmer Producer Company Limited (BFPCL)	Jarnail Singh	March 21, 2014
	Gurdeep Singh	January 4, 2019
	Harjinder Singh	January 4, 2019
Bhamarsi Farmers Producer Company Limited (BhFPCL)	Nirmal Singh	May 5, 2016
	Achhar Singh	May 5, 2016
	Harpal Singh	May 5, 2016
	Daljit Singh	May 5, 2016
	Manjit Singh	May 5, 2016
Changal Farmers Producer Company Limited (CFPCL)	Balvir Singh	April 11, 2019
	Manjit Singh	April 11, 2019
	Nirmal Singh	April 11, 2019
	Gurdeep Singh	April 11, 2019
	Dharminder Singh	NS
	Gulzar Singh	NS
Dholewal Grain Producer Company Limited (DGPCL)	Kehar Singh	May 13, 2015
	Atma Singh	May 13, 2015
	Bhagwant Singh	May 13, 2015
	Achar Singh	September 13, 2018
	Amandeep Kaur	September 13, 2018
	Sarabjit Kaur	13 September, 2018
Fatehgarh Sahib Vegetable Producer Company Limited (FSPVCL)	Atma Singh	July 28, 2014
	Kehar Singh	July 28, 2014
	Sarabjit Singh	July 28, 2014
	Ranjit Singh	July 28, 2014
	Mashkeen Singh	July 28, 2014
	Bhagwant Singh	December 13, 2017
Green Focus Farmer Producer Company Limited (GFFPCL)	Balwinder Singh	December 5, 2016
	Amandeep Singh	December 5, 2016
	Amritpal Kaur	December 5, 2016
	Bikramjit Singh	December 5, 2016
	Jagwant Singh	December 5, 2016
	Simranjit Singh	May 15, 2018
	Sandeep Kaur	May 15, 2018

Name	Directors	Appointed on
	Jujhar Singh	May 15, 2018
Khamano Farmers Producer Company Limited (KFPCL)	Jaspal Singh	March 23, 2016
	Raghvir Singh	March 23, 2016
	Pargat Singh	March 23, 2016
	Gurlal Singh	March 23, 2016
	Satwinder Singh	March 23, 2016
Nojvan Farmer Producer Company Limited (NFPCL)	Balvinder Singh Thind	January 19, 2017
	Jagmohan Singh	January 19, 2017
	Kamalvir Singh	January 19, 2017
	Baljinder Singh	January 19, 2017
	Avtar Singh	January 19, 2017
Punjab Organic Fruit and Vegetable Farmer Producer Company Limited (POVFPCL)	Hardeep Singh	February 21, 2017
	Hardeep Singh	February 21, 2017
	Rampal	February 21, 2017
	Hardeep Singh	February 21, 2017
	Jaswant Singh	February 21, 2017
Rupnagar Farmer Producer Company Limited (RFPCL)	Bhupinder Singh	April 3, 2013
	Shamsher Singh	April 3, 2013
	Didar Singh	April 3, 2013
	Rajvinder Singh	3 April, 2013
	Gurnam Singh	NS
	Iqbal Singh	NS
	Ranjeet Singh	NS
	Sarbjeeet Kaur	February 24, 2020
Sanjh Farmer Producer Company Limited (SFPCL)	Jagsir Singh	February 28, 2017
	Harjinder Singh	February 28, 2017
	Jagmeet Singh	February 28, 2017
	Parminder Singh	February 28, 2017
	Harjinder Singh Brar	July 6, 2017

**Note:** NS implies not supplied

## ANNEXURE B

### Financial Results of FPCs

	AFPCl		AzFPCl		AkFPCl		BFPCl		BhFPCl	
	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019
<b>Panel A: Balance Sheet Items (as at March 31 in ₹)</b>										
Paid Up Share Capital	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00
Reserves & Surplus	(25,600.00)	(28,234.58)	1,70,796.00	(35,000.00)	(11,927.98)	(15,043.54)	2,13,287	86,176	46,367.00	45,719.00
LT Borrowings	-	-	-	-	-	-	-	-	-	-
Deferred Tax Liabilities	-	-	-	-	-	-	-	-	-	-
ST Borrowings	-	-	-	-	-	-	1,00,000	1,00,000	-	-
Trade Payables	-	-	-	-	-	-	1,55,609	44,953	-	-
Other Payables	-	-	40,000.00	-	-	-	-	-	-	-
Other Current Liabilities <sup>a</sup>	9,000.00	9,000.00	-	-	10,000.00	9,000.00	20,579.00	7,799.00	45,000.00	2,94,255.00
ST Provisions	-	-	-	-	-	-	27,750.00	15,750.00	-	-
Fixed Asset	-	-	97,750.00	-	-	-	87,755	35,260	-	-
Deferred tax assets (net)	-	-	-	-	-	-	-	-	-	-
LT Loans & Advances	-	-	-	-	-	-	-	-	-	-
Other Non-Current Assets <sup>b</sup>	9,200.00	13,800.00	-	-	9,200.00	13,800.00	1,500.00	1,500.00	-	-
Inventories	-	-	1,15,369.00	-	-	-	12,568.00	1,691.00	-	-
Trade Receivables	-	-	-	-	-	-	4,77,582.00	2,74,672.00	-	-
Cash & Cash Equivalents	74,200.00	66,965.42	97,677.00	65,000.00	88,872.02	73,356.46	11,404.00	37,397.00	1,91,367.00	4,39,974.00
ST Loans & Advances	-	-	-	-	-	6,800.00	-	-	-	-
Other Current Assets	-	-	-	-	-	-	26,416.00	4,158.00	-	-
<b>Panel B: Profit and Loss Items (for the year ended in ₹)</b>										
Revenue from Operations <sup>c</sup>	96,000.00	90,000.00	17,22,902.00	0.00	1,73,720.00	1,88,800.00	28,45,190.00	15,58,861.00	4,15,250.00	14,750.00
Other Income	-	-	85,000.00	-	-	-	3,41,671.00	2,45,728.00	-	4,64,000.00
Purchases	-	-	9,57,319.00	-	-	-	27,70,491.00	14,81,485.00	-	-
Cost of materials consumed	-	-	-	-	-	-	-	-	-	-
Changes in Stock-in-Trade	-	-	-	-	69,800.00	76,000.00	(10,877.00)	43,892.00	-	-
Employee Benefit Expenses	-	-	4,80,000.00	-	-	-	1,20,354.00	1,40,315.00	2,93,230.00	3,07,100.00
Finance Costs <sup>d</sup>	7,895.42d	3,104.58d	-	-	304.44	387.27	4,855.00	2,430.00	-	908.00
Administrative Expenses	-	-	27,147.00	-	-	-	-	-	-	-
D & A Expenses <sup>e</sup>	-	-	21,602.89 <sup>i</sup>	-	-	-	21,005.00 <sup>ii</sup>	22,772.00 <sup>ii</sup>	-	-
Other Expenses <sup>f</sup>	85,470.00	85,250.00	1,16,037.00	35,000.00	1,00,500.00	1,10,300.00	1,53,921.00	1,61,474.00	1,21,372.00	1,70,023.00
EBITDA	2,634.58	1,645.42	2,27,399.00	-	3,115.56	2,112.73	1,48,116.00	(25,007.00)	648.00	719.00
EBT	2,634.58	1,645.42	2,05,796.00	(35,000.00)	3,115.56	2,112.73	1,27,111.00	(47,779.00)	648.00	719.00
Tax	-	-	-	-	-	-	-	-	-	-
EAT	2,634.58	1,645.42	2,05,796.00	(35,000.00)	3,115.56	2,112.73	1,27,111.00	(47,779.00)	648.00	719.00
Basic & Diluted EPS	0.26	0.16	20.58	(3.50)	0.31	0.21	13.00	(5.00)	0.06	0.07

	CFPCL		DGPCL		FSVPC		GFFPCL		KFPCL	
	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019
<b>Panel A: Balance Sheet Items (as at March 31 in ₹)</b>										
Paid Up Share Capital	5,00,000.00	0.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00
Reserves & Surplus	–	–	–	–	1,05,279.96	1,18,980.96	(48,038.50)	(85,000.00)	6,804.00	5,984.00
LT Borrowings	–	–	–	–	1,48,000.00	2,00,000.00	–	–	–	–
Deferred Tax Liabilities	–	–	–	–	–	–	–	–	–	–
ST Borrowings	–	–	–	–	–	–	–	–	–	–
Trade Payables	–	–	–	–	–	–	–	–	3,000.00	7,000.00
Other Payables	–	–	–	–	–	–	–	–	–	–
Other Current Liabilities <sup>a</sup>	2,500.00	0.00	98,089.00	1,09,720.00	50,040.00	40,040.00	22,800.00	9,000.00	–	–
ST Provisions	–	–	–	–	–	–	–	–	–	–
Fixed Asset	15,500.00	0.00	80,200.00	80,200.00	1,09,113.00	1,44,487.00	–	–	–	–
Deferred tax assets (net)	–	–	–	–	–	–	–	–	–	–
LT Loans & Advances	–	–	–	–	–	–	–	–	24,079.00	24,079.00
Other Non-Current Assets <sup>b</sup>	27,840.00	0.00	49,413.76	42,974.56	–	–	9,200.00	13,800.00	–	–
Inventories	–	–	–	–	–	–	–	–	–	–
Trade Receivables	–	–	–	–	64,937.00	–	–	–	–	–
Cash & Cash Equivalents	4,59,160.00	0.00	37,254.14	57,865.44	1,57,320.96	265,868.96	65,561.50	10,200.00	66,725.00	67,905.00
ST Loans & Advances <sup>c</sup>	–	–	31,221.10	26,680.00	25,079.00	25,079.00	–	–	–	–
Other Current Assets	–	–	–	–	46,870.00	23,586.00	–	–	19,000.00	21,000.00
<b>Panel B: Profit and Loss Items (for the year ended in ₹)</b>										
Revenue from Operations <sup>d</sup>	0.00	0.00	–	–	2,13,65,763.03	–	98,250.00	–	95,320.00	4,35,000.00
Other Income	–	–	–	–	7,75,428.00	2,64,977.00	–	–	–	–
Purchases	–	–	–	–	2,13,65,763.03	–	37,800.00	–	78,000.00	3,18,980.00
Cost of materials consumed	–	–	–	–	–	–	–	–	–	–
Changes in Stock-in-Trade	–	–	–	–	–	–	–	–	–	–
Employee Benefit Expenses	–	–	–	–	–	–	–	–	6,500.00	75,500.00
Finance Costs <sup>e</sup>	–	–	–	–	–	–	88.50	–	–	–
Administrative Expenses	–	–	–	–	–	–	–	–	–	–
D & A Expenses <sup>f</sup>	–	–	–	–	35,374.00	35,374.00	–	–	–	–
Other Expenses <sup>g</sup>	–	–	–	–	7,53,755.00	2,52,181.06	23,400.00	55,100.00	10,000.00	35,500.00
EBITDA	–	–	–	–	21,673.00	12,795.94	36,961.00	(55,100.00)	820.00	5,020.00
EBT	–	–	–	–	(13,701.00)	(22,578.06)	36,961.00	(55,100.00)	820.00	5,020.00
Tax	–	–	–	–	–	–	–	–	–	–
EAT	–	–	–	–	(13,701.00)	(22,578.06)	36,961.00	(55,100.00)	820.00	5,020.00
Basic & Diluted EPS	–	–	–	–	(1.37)	(2.26)	3.70	(5.51)	0.08	0.50

	NFPCFL		POVFPCL		RFPCL		SFPCL	
	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019	FY2020	FY2019
<b>Panel A: Balance Sheet Items (as at March 31 in ₹)</b>								
Paid Up Share Capital	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00	2,33,900.00	1,00,000.00	1,00,000.00	1,00,000.00
Reserves & Surplus	4,170.78	2,378.00	4,99,070.02	4,86,487.68	5,04,756.00	4,34,447.00	(57,183.00)	(42,985.30)
LT Borrowings	–	–	–	–	2,51,705.00	4,96,255.00	–	–
Deferred Tax Liabilities	–	–	–	–	4,650.00	–	–	–
ST Borrowings	–	–	–	–	–	–	1,39,960.00	1,64,960.00
Trade Payables	–	–	–	–	2,16,288.00	6,45,006.00	–	–
Other Payables	–	–	–	–	–	–	–	–
Other Current Liabilities <sup>a</sup>	10,000.00	440.00	2,14,908.00	–	35,362.00	2,775.00	92,620.00	1,13,120.00
ST Provisions	–	–	40,000.00	10,000.00	12,70,240.00	19,08,191.00	–	–
Fixed Asset	17,742.00	32300.00	78,698.00	86,163.00	4,69,464.00	3,62,270.00	2,61,487.00	3,19,291.00
Deferred tax assets (net)	–	–	–	–	–	–	–	–
LT Loans & Advances	–	–	–	–	–	1,534.00	–	–
Other Non-Current Assets <sup>b</sup>	–	–	–	–	–	–	–	–
Inventories	–	1,500.00	24,500.00	–	2,71,046.00	3,83,021.00	–	11,500.00
Trade Receivables	–	–	2,12,346.00	–	1,94,897.00	9,16,924.00	–	–
Cash & Cash Equivalents	96,428.78	69,018	5,38,434.02	5,10,324.68	65,266.00	84,920.00	13,910.00	4,303.70
ST Loans & Advances <sup>c</sup>	–	–	–	–	–	–	–	–
Other Current Assets	–	–	–	–	2,69,567.00	1,59,522.00	–	–
<b>Panel B: Profit and Loss Items (for the year ended in ₹)</b>								
Revenue from Operations <sup>d</sup>	4,79,730.00	3,45,860.00	10,11,560.00	7,31,586.00	2,47,75,009.00	3,29,36,764.00	12,050.00	78,163.00
Other Income	73,500.00	1,19,000.00	–	–	69,419.00	2,223,372.00	2,29,210.00	2,74,000.00
Purchases	–	3,54,530.00	–	–	–	–	–	48,864.80
Cost of materials consumed	–	–	8,06,080.00	7,14,786.00	–	–	–	–
Changes in Stock-in-Trade	1,500.00	–	–	–	2,36,85,759.00	3,16,30,731.00	11,500.00	18,000.00
Employee Benefit Expenses	75,000.00	60,000.00	1,40,000.00	–	1,46,018.00	2,21,379.00	96,000.00	96,000.00
Finance Costs <sup>e</sup>	59.22	96.00	–	–	16,638.00	4,549.00	–	–
Administrative Expenses	–	–	–	–	–	–	–	–
D & A Expenses <sup>f</sup>	14,558.00	5,700.00	7,465.00	7,397.00	33,754.00	83,121.00	57,804.00	23,209.00
Other Expenses <sup>g</sup>	4,60,320.00	42,840.00	45,432.66	16,722.22	8,71,627.00	10,19,913.00	90,153.70	1,96,710.00
EBITDA	16,350.78	7,394.00	20,047.34	(77.78)	1,24,386.00	2,83,564.00	43,606.30	(7,411.80)
EBT	1,792.78	1,694.00	12,582.34	(7,319.22)	90,632.00	2,00,443.00	(14,197.70)	(30,620.80)
Tax (Current + Deferred)	–	–	–	–	20,324.00	53,477.00	–	–
EAT	1,792.78	1,694.00	12,582.34	(7,319.22)	70,308.00	1,46,966.00	(14,197.70)	(30,620.80)
Basic & Diluted EPS	0.18	0.13	1.26	0.73	3.01	14.70	(1.42)	(3.06)

**Notes:** The financial statements have been prepared and presented in accordance with Indian GAAP under historical cost conventions.

<sup>a</sup> Audit fee/professional fee payable; <sup>b</sup> Preliminary expenses written off; <sup>c</sup> Loans and advances given to related parties, IGST/CGST/SGST recoverable; <sup>d</sup> Sales or income from services; <sup>e</sup> Bank charges; <sup>f</sup> Rate of depreciation on plant and machinery @ 18.10%, DSR machine @15%, Furniture & Fittings @ 10%; <sup>g</sup> Payment to auditors, printing and stationary, professional expenses, preliminary expenses, telephone and electricity expenses, seed expense, other fees, taxes, etc.



<b>Funding Call</b>	Growing Research Capacity: UKRI GCRF
<b>Country</b>	India
<b>Title</b>	Transforming India's Green Revolution by Research and Empowerment for Sustainable food Supplies (TIGR <sup>2</sup> ESS)
<b>Grant Number</b>	BB/P027970/1
<b>Website</b>	<a href="https://tigr2ess.globalfood.cam.ac.uk/">https://tigr2ess.globalfood.cam.ac.uk/</a>

