

Financial Performance Analysis of Farmer Producer Companies in the State of Andhra Pradesh

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ABSTRACT

The assessment of financial performance of farmer producer companies (FPCs) will provide deeper insights regarding management efficiency and organization health. Besides, performance of FPCs is vital for long run sustainability. In this context the present study aims to assess the performance of eight FPCs from 2018 to 2021 operating in the state of Andhra Pradesh through growth rates and financial ratios. Due to uncertainty in logistics operations in view of COVID 19, FPCs reported a decline in sales growth in 2021 compared to 2020. However, all FPCs except FPC 8 had shown improvement in sales and assets since their incorporation. The liquidity positions and operating efficiency of the FPCs were found satisfactory except FPC 8, while a shift towards equity finance from debt finance was observed through solvency ratios. Due to growth in operating expenses, a decline in the profitability of FPCs has been observed over the study period. The performance scores obtained through compiling of all financial ratios indicated that FPC 5 had better performance while that of FPC 8 had poor performance.

Keywords : Farmer Producer Companies, Financial performance, Liquidity position, Solvency, Operating efficiency, Profitability

INDIAN agriculture has an overwhelming majority of small and marginal farmers, accounted for 86.08 per cent of total farmers in India and with an average land holding size of 1.08 hectares. (Anonymous, 2019). These small holders are confronted with several challenges due to their size of operation. Some of the constraints include poor access to credit, markets, infrastructure, information, extension services, technical know-how, lower levels of knowledge, low bargaining power due to lower quantities of marketable surplus, market imperfections, higher transaction costs etc., (Barham & Chitemi, 2009 and Von Loeper *et al.*, 2016). The body of literature available on collective action by small holders emphasises on attaining scale economies through reduction of transaction costs, higher productivity

thereby leading to improvement in economic gains (Gururaj and Mahadevaiah, 2018). Collective action act as an efficient mechanism to improve the incomes of resource poor farmers, enhance productivity and marketing performance (Bernard & Spielman, 2009; Tien & Chandrakanth, 2015; Singh & Vatta, 2019 and Vadivelu & Kiran, 2013). Among the collective action models, the performance of traditional cooperatives specially in agriculture are exhibiting poor performance as they were plagued with corruption, elite capture, bureaucracy, funds mismanagement, poor market orientation etc., (Singh, 2008 and Ramappa & Yashashwini, 2018).

Post liberalization, India also felt the need for new institutional reforms that gives more freedom to

cooperatives and operate as professionally managed business entities and work efficiently in a competitive environment and improve their performance. This led to formation of farmer producer company (FPC), through amendment of Companies (Amendment) Act, 2002 by inserting an additional part 'Part IX A (Anonymous, 2000). A Producer Organisation (PO) is a generic term that indicate an organization of producers' producing primary produce that can be either farm or non-farm produce. If the primary producers are farmers, then it is farmer producer organization. (FPO) A producer company (PC) is a type of PO registered under Section 581(C) of 'Indian Company Act', 1956 as amended in 2013. FPCs are viewed as hybrids between cooperatives and producer companies (Trebbin and Hassler, 2012). Although they are undertaking wide variety of activities, several studies reported that input trading and food grains marketing are major business activities handled by FPOs.

The concept of FPC, although was not much recognized during the initial stages, to bring more number of small holders under FPOs, Government of India (GoI) from time to time has initiated several policy initiatives for farmer producer organizations (FPOs) promotion. SFAC, NCDC and NABARD are identified as implementing agencies to support FPOs in India (Anonymous, 2020). Compared to other organizations, NABARD is playing a lead role in promoting FPOs since 2011. Today several financial, non-financial institutions, state governments, private organizations under corporate social responsibility, non-governmental organizations through state, national and international funded projects are infusing capital and supporting and promoting FPOs for their sustainability in the long run (Anonymous, 2019). More than 9000 FPOs have been promoted in India since 2011 as per various secondary sources.

Despite policy and institutional support, reports are indicating that only few FPOs are prospering through establishing linkages with input and output markets. Around 50 per cent are still in the phase of member mobilisation, raising equity, business planning and other management related developmental stages,

around 20 per cent struggling to survive while around 30 per cent of FPCs are currently operating viably (Anonymous, 2019). Several studies assessed the FPOs performance through case study analysis, cross case analysis, identification of challenges and constraints, governance issues and to some extent assessment of growth in profits and sales were done (Subash *et al.*, 2019; Trebbin & Hassler, 2012; Venkata kumar & Sontakki, 2012; Singh & Singh, 2013; Nayak, 2016 and Kanitkar, 2016).

An organization health is a blend of financial and non-financial performance (Dey, 2018). But understanding the financial performance of companies through assessment of their financial information will provide much deeper insights both to the policy makers and stakeholders regarding their actual performance, management efficiency, thereby providing more scope for identification of bottle necks. The literature available on assessment of financial performance of FPOs particularly FPCs were very limited and assessed the FPCs performance through employing growth rates, financial ratios, Z scores etc., (Garg, 2012; Chauhan & Murray, 2019; Kakati & Roy, 2021 and Mourya & Mehta, 2021). As assessment of FPCs through financial ratio analysis will give more profound information regarding the organization health and financial performance. Hence in this context, the present study has been taken up with the following objectives.

1. To profile the characteristics of FPC identified for the study
2. To assess the growth of sales and assets of the sample FPCs and
3. To assess the financial performance of sample FPCs

METHODOLOGY

A district wise list of FPOs operational for more than four consecutive financial years *i.e.*, from 2018 to 2021 and also regularly filing all statutory compliances in Andhra Pradesh state were collected from promoting agencies. The two districts with highest number of functional FPOs in Rayalaseema and costal

Andhra region of Andhra Pradesh were identified and two FPOs from the list were selected randomly for the study purpose. To attain the study objectives, eight FPCs that are meeting the above conditions were identified and the primary data pertaining to membership, business activities and any pre and post-harvest linkages established by respective FPOs were obtained from board of management of respective FPO. Secondary data pertaining to financial information was obtained from the audited financial statements (balance sheet and profit and loss account) submitted to Registrar of Companies (ROC). The obtained information was analyzed thorough annual growth rates and financial ratio analysis.

Growth in sales and assets are very important for viability and long-term sustainability of FPCs as they indicate the ability of FPCs in generating revenues. Hence to record the impact of business operations,

annual growth rates with regard to sales and total assets were computed. The formulae to compute year on year growth rate is given below. The numerator represents the difference between two successive periods and denominator indicates the beginning year,

$$\text{Sales growth rate} = \frac{S_t - S_{t-1}}{S_{t-1}} \times 100$$

$$\text{Assets growth rate} = \frac{A_t - A_{t-1}}{A_{t-1}} \times 100$$

Financial ratios were computed for the years 2018, 2019, 2020 and 2021 to assess the FPCs financial performance over a period of time. The broad categories of financial ratios used in the analysis are liquidity ratios, leverage ratios, efficiency ratios and profitability ratios. The details regard the various financial ratios, their categories along with formula are presented in Table 1. To categorize the FPCs based

TABLE 1
List of financial ratios along with formulae

Measurement Factor	Financial Ratios	Formulae
Liquidity	Current Ratio	Current Assets / Current Liabilities
	Quick Ratio	Quick Assets / Current Liabilities *QA = Current Assets - Inventories
	Absolute Cash Ratio	Cash and Bank balances + Current Investments / Current Liabilities
Solvency/Leverage	Debt - Equity Ratio (times)	Total Debt / Net Worth
	Debt - Asset ratio (times)	Total Debt / Total Assets
	Equity Ratio (times)	Total Equity / Total Assets
	Financial Leverage Ratio	Average Total Assets / Shareholders Equity
Asset Management / Operating Efficiency	Total Assets Turnover	Sales / Average total assets
	Fixed Assets Turnover	Sales/Average Net fixed Assets
	Current Assets Turnover	Sales/Current Assets
	Equity Turnover	Sales/Net worth
Operating Profitability	Gross Profit Margin (%)	Gross Profit / Sales * 100
	Operating Profit Margin (%)	Operating Profit/ Sales* 100
	Net Profit Margin (%)	Net Profit/ Sales * 100
	Operating Expenses Ratio (%)	Operating Expenses/Sales * 100
	Return on Total Assets (ROA) (%)	EBIT/ Average Total Assets* 100 *EBITDA - Earning Before interest and tax
	Return on Equity (%)	Net Profit/ Net Worth* 100
	Earnings per Share	Net Profit/Total number of shares* 100

on their performance, performance score is given for each financial measurement ratio listed under various measurement categories on a scale of 1 to 5. The scale has been developed based on the arbitrary standards designed for each ratio across various industries. A performance score of '5' is given when the ratio is at its most optimum range, a score of '3' given when it is at minimum arbitrary standard and a score of '1' is given when the ratio is at the least. FPC wise the average ratio over the study period for each financial ratio was obtained. Scores are given to these ratios based on the performance standard. Then FPC wise, the average scores for each measurement factor and the overall average performance were computed to categorize the FPCs. FPCs with a score ranging between 4 to 5 are categorized as 'very high' performing, 3 to 4 as 'high', 2 to 3 as 'medium' and 1 to 2 as 'low performing' companies.

RESULTS AND DISCUSSION

Profile Characteristics of FPCs

The information pertaining to FPCs business activities, membership base and linkages established for undertaking pre and post-harvest business operations are detailed in Table 2. Among the FPCs identified for the study, the five and two FPCs are in functional since six and five years respectively while one FPO is in operation for the past four years. The membership base of Sehamitha FPC is highest followed by Pragathi Yuva Kendram FPC while Duttaluru Pragathi FPC recorded for the lowest. Around 50.0 of the sample FPCs were undertaking both input and output marketing activities. Within the sample, FPCs with codes 1, 2 3 and 5, 6, 7 had established market linkages with organized (private, government organizations, startups) and unorganized

TABLE 2
Profile Characteristics of Farmer Producer Companies

FPC Name	Location District	FPC code	No: of years in Operation	Business Activity	Total Membership (As on 31.03.2022)	Any Linkages Established
Palamaner Farmer Producer Company Ltd	Chittoor	FPC 1	5	Marketing of Vegetables	680	Forward
MaryadaRamanna Patnam Farmers Producer Company Ltd	Chittoor	FPC 2	4	Trading of Agri Inputs Marketing of Tomato	1360	Backward and forward
Mahanandi Banana Farmers Producer Company Ltd	Kurnool	FPC 3	5	Trading of Agri inputs Marketing of Banana	500	Backward and forward
Y Khanapuram Farmers Producer Company Ltd	Kurnool	FPC 4	6	Trading of Agri inputs Marketing of Vegetables	607	Backward and forward
Parimala Flower Producer Company Ltd	Guntur	FPC 5	6	Trading of Agri inputs Marketing of Flowers	760	Backward and forward
Sehamitha Agri Producers Company Ltd	Guntur	FPC 6	6	Marketing of Cash Crops like Turmeric, chilli and other farm products	2153	Forward
Pragathi Yuva Kendram Farmers Producers Company Ltd	Nellore	FPC 7	6	Marketing of flowers and other farm products	1559	Forward
Duttaluru Pragathi Pulses Producer Company Ltd	Nellore	FPC 8	6	Marketing of Pulses	258	Forward

players (traders, wholesalers) respectively for marketing of farm produce. FPCs with codes 2, 3, 4 and 5 had established input linkages with agri input companies like IFFCO, Coromandel fertilizers, Syngenta for trading of agricultural inputs.

Sales and Assets Growth Rates of Sample FPCs

Growth is an important parameter for long term sustainability and viability of any business. Sales and assets growth over a fixed time period will reflect the extent of impact created by FPCs on small holder member farmers with regard to their access to inputs, infrastructure and markets. The efficiency of management decisions are also reflected in sales and assets growth over a period of time. It can be inferred from Table 3 that, sales growth of all FPCs have declined in 2021 compared to previous year, due to non-confidence of handling market operations as there existed uncertainty in logistic services arised out of COVID 19 pandemic. A negative growth in sales and assets has been noticed in FPC 8, due to non-conducting of business activities actively which is also reflected in very minimal membership base. Although a fluctuating trend in the assets of FPCs have been noticed for the remaining FPCs majorly due to changes in current assets, but an improvement in total assets was observed since their incorporation.

Financial Ratio Analysis of FPCs

The results of various financial ratios obtained through analyzing the financial information available from balance sheet and income statement are presented

below to assess the financial viability, performance and risk bearing capacity of FPCs

Liquidity Measurement Ratios

Liquidity ratios majorly indicate the ability of FPCs in meeting the immediate and current obligations. The liquidity ratios are detailed in Table 4. The optimum current ratio generally preferred is either 1.5:1 or 2:1, though varies across industries. It is evident from current ratios that all FPCs were able to meet their short-term obligations despite varying within and across the firms over the study period. An improvement in the liquidity positions was also observed from 2018 to 2021. Very higher current ratios are also not a good sign of performance, as they indicate the inefficiency in current asset utilization. The higher ratios for FPC 5 for the years 2020 and 2021, was majorly attributed to inefficiency in conversion of inventories and trade receivables into cash. As FPC 7 was still in the planning phase of their business operations only cash equivalents and short-term provisions occupied the total portion of current assets and current liabilities for the year 2018. Hence, FPC 7 had higher liquidity ratios for the year 2018. FPC 7 Companies 1 to 5 have been maintaining quick ratios above optimum levels of 1:1, indicating a decline of closing inventory levels. Quick ratios lower than optimum levels for companies 6 and 7, indicate that the companies have to improve their sales turnover to meet the current obligations.

The cash ratios for companies 1 to 5 was found satisfactory but were highly fluctuating indicating a

TABLE 3
Sales and assets growth rates of sample FPCs

Financial Year	Particulars	FPC 1	FPC 2	FPC 3	FPC 4	FPC 5	FPC 6	FPC 7	FPC 8
Annual Growth Rates									
2019	Turnover (Sales)	2.73	-	5.89	(0.16)	1.40	2.08	5.52	-
2020		5.64	8.02	0.13	(0.29)	2.33	0.09	1.17	(0.94)
2021		0.95	3.52	0.00	0.85	0.02	0.10	0.49	(1.00)
2019	Total Assets	2.18	2.08	0.07	0.60	0.68	1.46	0.32	-
2020		1.68	2.25	1.53	0.61	0.56	0.79	0.90	-
2021		(0.10)	0.44	(0.05)	0.06	2.45	1.41	0.31	-

Note : () indicates negative value

TABLE 4
Liquidity ratios of FPCs from 2018 to 2021

Measurement Factors	Year	Particulars	FPC 1	FPC 2	FPC 3	FPC 4	FPC 5	FPC 6	FPC 7	FPC 8
Liquidity Ratios	2018	Current Ratio	1.17	6.40	1.22	0.95	1.17	2.2	39.5	79.5
	2019		7.09	2.48	1.69	1.35	0.59	1.3	0.2	54.9
	2020		3.19	6.68	1.80	2.18	10.36	1.6	1.3	41.0
	2021		1.79	7.20	1.47	2.28	40.12	1.4	1.2	37.8
	2018	Quick Ratio	1.12	1.12	1.22	0.95	2.02	1.3	39.5	79.5
	2019		5.90	5.90	1.34	1.35	2.07	0.9	0.2	54.9
	2020		2.86	2.86	1.52	2.18	1.17	0.5	0.7	41.0
	2021		1.30	1.30	1.29	2.28	3.69	0.3	0.5	37.8
	2018	Absolute Cash Ratio	0.84	0.84	1.22	0.44	1.75	1.2	39.5	79.5
	2019		5.90	5.90	1.24	0.30	1.46	0.3	0.2	54.9
	2020		1.53	1.53	0.60	2.18	0.78	0.1	0.7	41.0
	2021		0.83	0.83	0.47	2.28	2.70	0.0	0.2	37.8

mixed phenomenon of delay in payments to FPCs at certain times and buildup of idle cash reserves at other periods. Very low cash ratios for companies 6 and 7 was attributed majorly due to delay in trade receivables and higher levels of closing inventories, which might have significant effect on the future business operations. Due to very minimal business activities as evidenced from sales growth for FPC 8, the cash reserves of the company were lying idle. Hence, a very high liquidity ratios were reported for FPC 8, which is not a sign of good performance. Thus, it can be inferred that the sample FPCs were maintaining optimum liquidity to meet the current obligations. The results are consistent with the findings of Kakati and Roy, 2021, who also reported that most of the FPCs in India were capable of meeting current obligations.

Solvency Measurement Ratios

Solvency or leverage ratios measures the extent to which FPCs uses the debt to finance their growth and is a measure of financial soundness of the company. Solvency ratios of sample FPCs are presented in Table 5. For all the FPCs over the study period the debt asset ratio is less than one indicating that the FPCs are owning comparatively more assets in relation

to their liabilities and have the capacity to repay the liabilities. The debt equity ratios, equity ratios and financial leverage ratios for FPCs 1 and 6 indicated that, these firms have been more dependent on debt financing to finance their assets and business operations. FPCs 5 and 7 have no much debt obligations and major portion of business operations have been financed through equity financing. The leverage ratios for FPCs 2, 3 and 4 showed that despite debt and equity were occupying a significant portion in the capital structure of these firms, a trend of shifting towards debt financing from equity financing has been observed during the study period. It should not be misinterpreted that from the lower leverage ratios for FPC 8 that the firm is financially sound. The lower ratios were due to very poor business activities and low levels of assets held by the company.

Thus, it can be inferred from the solvency ratios that, the debt finance not only occupied a significant portion in their capital structure and a shift towards debt financing was also observed for all the sample FPC over the study period except for FPC8. This can also be interpreted that, financial institutions majorly NABARD are actively supporting FPCs in their business operations. The results are contrary to

TABLE 5
Solvency Ratios of FPCs from 2018 to 2021

Measurement Factors	Year	Particulars	FPC 1	FPC 2	FPC 3	FPC 4	FPC 5	FPC 6	FPC 7	FPC 8
Solvency Ratios	2018	Debt- Asset	0.86	0.00	0.81	0.87	0.48	0.40	0.43	0.16
	2019	Ratio (times)	0.66	0.13	0.59	0.62	0.00	0.73	0.27	0.23
	2020		0.92	0.70	0.54	0.55	0.09	0.84	0.24	0.30
	2021		0.91	0.68	0.66	0.61	0.62	0.93	0.30	0.33
	2018	Debt - Equity	5.92	0.00	4.23	6.78	0.92	0.67	0.75	0.19
	2019	Ratio (times)	1.96	0.15	1.45	1.59	0.00	2.77	0.36	0.29
	2020		11.52	2.29	1.17	1.23	0.10	5.18	0.32	0.44
	2021		9.59	2.14	1.94	1.56	1.61	12.55	0.43	0.49
	2018	Equity Ratio	0.14	1.00	0.19	0.13	0.52	0.60	0.57	0.84
	2019	(times)	0.34	0.87	0.41	0.39	1.00	0.27	0.74	0.77
	2020		0.08	0.30	0.46	0.45	0.91	0.16	0.76	0.70
	2021		0.09	0.32	0.34	0.39	0.38	0.07	0.70	0.67
	2018	Financial	6.92	1.00	5.23	7.78	1.92	1.67	1.75	1.19
	2019	Leverage Ratio	14.45	2.04	5.42	10.12	2.58	2.89	2.03	1.00
	2020	(times)	5.44	2.44	4.33	3.37	1.28	5.26	1.97	1.13
	2021		11.87	4.01	2.12	2.29	2.46	10.55	1.53	1.38

findings of Singh & Singh, 2013 and Kakati & Roy, 2021 wherein the FPOs were majorly dependent on equity finance as availing debt finance from financial institutions was a major challenge.

Asset Management Measurement Ratios

Operating efficiency ratios reflects the efficiency with which the company utilizes its assets in generating revenues from their business operations and various operating efficiency ratios of FPCs are shown in Table 6. The asset turnover ratios of FPCs 1, 2 and 7 had improved indicating that the assets were being utilized efficiently in generating sales. Due to inefficiency in asset utilization, the operating efficiency for FPC 6 had declined over four-year period. The operating efficiency of FPCs 3, 4 and 5 though found satisfactory but exhibited a fluctuating trend during the study period due to higher level of changes in current assets. The higher fixed asset turnover ratios for FPCs 3 and 5 were majorly due to maintaining very lower level of fixed assets and more dependent on current assets to generate sales which

should not be mistakenly interpreted as high fixed assets efficiency. FPC 1 had higher operating efficiency compared to other FPCs under study. The lower turnover ratios for FPC 8 indicates that the assets of the firm have been lying idle due to very minimal business activity. Thus it can be inferred that operating efficiency of sample FPCs showed an average satisfactory performance except FPC 8.

Profitability Measurement Ratios with Regard to Sales

Profitability with regard to sales measures the amount of profits generated by FPCs through their business operations. It can be informed from Table 7 that the gross profit margins of all FPCs during the study period were positive, indicating that FPCs were able to meet the purchasing cost of goods sold through the sales generated from business operations. All the FPCs reported a decline in the net profit margin during study period. Primarily, FPCs had been reporting lower gross margins and larger portion of these gross revenues were moving towards meeting operating expenses and

TABLE 6
Operating Efficiency ratios of FPCs from 2018 to 2021

Measurement Factors	Year	Particulars	FPC 1	FPC 2	FPC 3	FPC 4	FPC 5	FPC 6	FPC 7	FPC 8
Operating Efficiency	2018	Total Assets	1.22	0.00	1.16	3.07	1.15	1.10	0.16	0.00
	2019	Turnover Ratio	2.18	0.42	7.70	1.98	2.06	1.75	0.91	0.70
	2020		5.17	1.18	4.76	0.87	4.26	0.96	1.20	0.06
	2021		7.30	2.86	3.42	1.28	1.60	0.48	1.18	0.00
	2018	Fixed Assets	0.00	0.00	1.17	4.29	1.23	1.14	0.39	0.00
	2019	Turnover Ratio	0.00	1.85	1561.09	5.92	32.46	20.42	1.16	0.00
	2020		29.00	2.45	217.11	2.26	96.54	11.49	1.53	0.00
	2021		0.14	6.53	116.79	2.90	102.16	9.31	1.80	0.00
	2018	Current	1.22	0.00	1.17	4.29	1.23	1.14	0.39	0.00
	2019	Assets turn -	4.10	0.54	7.73	2.97	2.20	1.94	4.33	0.70
	2020	over	10.39	2.67	4.86	1.43	4.46	1.05	5.46	0.06
	2021		11.78	5.96	3.52	2.28	1.63	0.51	3.44	0.00
	2018	Equity Turn	8.44	0.00	6.05	23.91	2.21	1.64	0.28	0.00
	2019	over	7.47	0.47	25.38	4.15	2.51	4.84	1.37	0.85
	2020		34.47	2.70	10.68	1.58	4.52	4.82	1.60	0.09
	2021		84.11	9.14	8.50	3.18	3.20	4.84	1.63	0.00

TABLE 7
Profitability ratios with regard to Sales of FPCs from 2018 to 2021

Measurement Factors	Year	Particulars	FPC 1	FPC 2	FPC 3	FPC 4	FPC 5	FPC 6	FPC 7	FPC 8
Profitability with regard to invest	2018	Gross Profit	10.39	0.00	22.12	24.10	71.21	22.30	7.37	0.00
	2019	Margin (%)	11.56	30.63	7.41	37.97	34.39	18.50	33.41	26.69
	2020		6.77	37.73	7.56	36.18	20.99	21.94	20.16	77.65
	2021		7.60	16.53	2.52	1.86	21.41	32.31	14.01	0.00
	2018	Net Profit	0.25	0.00	0.00	1.95	30.98	0.46	-235.53	0.00
	2019	Margin (%)	0.74	29.91	0.00	13.36	9.70	1.81	3.04	-39.19
	2020		-1.27	3.08	2.33	17.79	6.77	1.81	3.42	-389.82
	2021		0.07	2.30	0.05	-2.63	6.56	1.95	2.43	0.00
	2018	Operating	0.34	29.91	0.00	3.43	30.98	0.78	-212.66	0.00
	2019	Profit Margin	1.21	11.95	0.00	16.27	10.48	4.81	7.86	-39.14
	2020	(EBITDA) (%)	0.73	4.90	2.33	21.95	7.04	4.32	10.85	-388.83
	2021		1.35	5.38	0.05	0.19	6.78	17.28	7.64	0.00
	2018	Operating	10.05	0.00	22.12	21.28	40.23	21.64	242.90	0.00
	2019	Expenses	10.65	0.72	7.41	24.61	24.68	16.65	30.37	65.88
	2020	Margin (%)	8.04	34.65	5.23	18.39	14.22	19.99	16.74	467.47
	2021		7.53	14.24	2.47	4.49	14.86	30.50	11.58	0.00

hence the FPCs had reported lower net profit margins. However, FPC 4 and FPC 5 exhibited better performance compared to others. The profitability ratios of FPC 8 indicated that the performance of the company was very poor. Thus, it can be inferred that the profitability being a major issue, all the sample FPCs reported very low profits, indicating poor performance of FPCs over the study period. The findings of the present study were similar to that of Chauhan & Murray, 2019 and Kakati & Roy, 2021 also reported that profitability was the major reason for decline of shareholders' funds in most of the FPCs.

Profitability Measurement Ratios with Regard to Investment

Profitability with regard to investment indicates how well the FPCs are utilizing the capital in their day-to-day operations to generate profits. For computation of return on assets, operating profit (EBIT) was used in numerator rather than net income. As the business activities of FPCs are more or less similar, to account for actual efficiency of capital employed, the tax and interest differences across the firms were not taken into account. The profitability ratios with regard to investment are presented in Table 8. Due to improved efficiency in utilization of assets and equity capital, FPC 5 had performed better followed by FPC 4

(except for the year 2021), FPC 2 and FPC 6 for the study period. FPCs 1, 3 and 7 reported lower profitability (0 to 12 per cent) and better management efficiency of capital will provide scope for improvement of profits. The performance of FPC 8 was very poor as evidenced from the profitability ratios and hence there is need for improvement in business operations.

Categorization of FPCs based on Financial Measurement Ratios

Performance scores of various FPCs depicted in Table 9 infers that FPC 1 and FPC 2 had comparatively higher ability of meeting the short-term obligations compared to their peers over the study period. FPC 3 and FPC 7 had higher financial leverage, due to relying more on equity financing in purchase of assets compared to peers that had larger debt portion in their capital structure in relation to equity capital. The management efficiency of assets was higher for FPC 1 followed by FPC 3 and FPC 6 while the operating profitability of FPC 5 with regard to sales and assets was higher for the study period. Among the sample FPCs, the average performance of FPC 5 was comparatively higher followed by FPC 1 and FPC 2. The findings of the present study were similar to that of Chauhan and Murray, 2019 and Kakati & Roy,

TABLE 8
Profitability ratios with regard to investment of FPCs from 2018 to 2021

Measurement Factors	Year	Particulars	FPC 1	FPC 2	FPC 3	FPC 4	FPC 5	FPC 6	FPC 7	FPC 8
Profitability with regard to invest	2018	Return on	0.42	0.00	0.00	10.55	35.76	0.72	-38.02	-33.79
	2019	Assets (%)	2.84	16.80	0.00	31.66	22.92	8.22	2.81	-36.49
	2020		0.44	7.31	11.58	21.61	32.43	3.68	7.89	-29.03
	2021		6.56	8.99	0.16	-1.92	10.55	7.78	5.43	-8.07
	2018	Return on	2.14	0.00	0.00	46.61	68.74	0.84	-66.63	-40.07
	2019	Equity (%)	3.35	12.80	0.00	59.17	18.27	8.37	3.31	-57.85
	2020		-56.82	11.94	17.53	35.27	29.32	8.41	4.13	-48.95
	2021		5.64	19.18	0.50	-8.86	17.73	9.14	3.67	-12.55
	2018	Earnings	2.03	0.00	0.00	17.62	72.19	0.08	-189.6	-26.87
	2019	Per share	29.21	14.67	0.00	51.48	62.05	0.86	0.43	-24.56
	2020		-3.72	15.55	3.97	12.57	72.19	0.95	1.05	-13.96
	2021		0.39	29.30	0.64	-2.90	25.95	1.13	1.12	-3.18

TABLE 9
Performance scores of FPCs for various financial measurements

Measurement Factors	FPC 1	FPC 2	FPC 3	FPC 4	FPC 5	FPC 6	FPC 7	FPC 8
Performance Scores of FPCs								
Liquidity Factor	4.67	4.67	1.67	2.00	3.00	1.33	3.00	1.00
Financial Leverage	1.75	2.5	3.00	2.75	2.75	1.75	3.00	1.75
Operating Efficiency	3.33	2.00	2.33	2.00	1.67	2.33	2.00	1.00
Sales Based Profitability	1.00	1.33	1.00	1.67	2.67	2.00	1.33	1.00
Assets based Profitability	1.00	1.00	1.00	3.00	3.50	1.00	1.00	1.00
Average Performance Scores	2.35	2.30	1.80	2.28	2.72	1.68	2.07	1.15
Performance Category	Medium	Medium	Low	Medium	Medium	Low	Medium	Low

2021. However, it can be inferred from the overall performance scores that, FPCs are exhibiting medium to low performance due to lower levels of management efficiency.

Producer companies provides more scope for small holders in getting organized and reap larger benefits both through collective action and linking with high value markets. The performance of FPCs is very crucial for sustainability of small farmers in the long run. In this context, the performance of FPCs has been analyzed through various measurement factors from 2018 to 2021 to have an overview on how the business operations are being carried out by FPCs. The major findings of the study of eight sample FPCs indicated that, 50 per cent were undertaking business activity related to marketing of farm produce while another 50 per cent were performing both input trading and marketing activities. All FPCs reported a decline in sales growth in 2021 compared to 2020, due to uncertainty arised in logistic operations in view of COVID 19. However, the sample FPCs except FPC 8, showed an improvement in total assets since their incorporation. The FPCs have been maintaining adequate liquidity levels to meet their short-term business obligations. The solvency ratios indicated that FPCs are owning comparatively more assets than their liabilities while debt and equity are occupying a significant portion of capital structure except for FPC 7 and FPC 5. However, a shift towards debt financing from equity financing has been noticed during the study period. The operating efficiency was found

satisfactory except for FPC 6 for the study period. All the FPCs reported a decline in the net profit margin due to growth in operating expenses. The performance scores obtained through compilation of all measurement ratios indicated that FPC 5 had better performance and FPC 8 had poor performance. However, the performance category of all the eight sample FPCs was ranging between medium to low. Capacity building of management team of FPCs provides more scope for improvement of management efficiency in terms of assets and capital.

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