Evaluation of Performance of Farmer Producer Organizations (FPOs) in Medak District of Telangana State

C.D. Amitha¹, B. Savitha², V. Sudha Rani³ and P. Laxminarayana⁴

Abstract

Farmer Producer Organizations (FPOs) are emerging as a structure, which is indispensable in the development arena of agriculture and rural development programmes. In this article an attempt has been made to study the performance of FPOs. The study compares the performance of three selected FPOs on identified performance indicators. Three FPOs were selected randomly from three different promoting institutes viz., Suraksha Farmer Producer Company Ltd (SFPCL) promoted by Centre for Sustainable Agriculture (CSA) an independent research organization, Marpalli Kisan Kranthi Producer Company Ltd (MKKPCL) promoted by Vrutti NGO and Siddipet Kisan Agro Farmers Producer Company Ltd (SKAFPCL) promoted by ICRISAT. An ex-post facto research design was adopted for the study with a sample of 90 producer members, covering three FPOs in erstwhile Medak district of Telangana state. From the analysis, it was found that SFPCL was rated as average while, MKKPCL was rated as a poor performing FPO and performance of SKAFPCL was rated as good. This can be attributed to the institutional support received by the FPOs from their POPIs. Overall, the performance of FPOs was average to poor. This was due to insufficient knowledge on the business concept of FPOs among farmers and their inability to generate capital to carry out activities and provide services to their members.

Keywords: Farmer Producer Organizations, Performance Indicators.

¹ P.G. Scholar, College of Agriculture, PJTSAU, Rajendranagar, Hyderabad

² Asso. Prof. (Agril. Ext.), College of Agriculture, PJTSAU, Rajendranagar, Hyderabad

³ Director of Extension, College of Agriculture, PJTSAU, Rajendranagar, Hyderabad

⁴ Prof. (Agro.), College of Agriculture, PJTSAU, Rajendranagar, Hyderabad Corresponding Author e-mail: amithachandra12@gmail.com

Introduction

India has 60.4 per cent of agricultural land of which 45 per cent is irrigated land. The country is the second largest producer of fruits, vegetables, rice and wheat in the world and the largest producer of milk in the world. India had a stable and diversified GDP growth. The country which made a significant dent in the poverty level which dropped 46 per cent over two decades to an estimated 13.4 per cent in 2015 but is the home for 176 million poor people, while it is seeking to achieve sustainability, better growth, financial inclusion and social development (Anonymous, 2019).

In this scenario a solution is possible through exploring innovative market led extension models in order to integrate the farmers, especially the small farmers. As a market development initiative, farmer groups were formed to enable member-farmers to reap the benefits of economies of scale in purchase of inputs, processing, and marketing of their produce. Forming a producer organization can also provide the member-farmers access to timely and adequate credit and provide linkages to markets. There is a rising optimism that the farmers organizations can act as a potential driving force for agricultural and rural development. Farmers' organizations are working as 'engines' of development that can uphold the pennon of development even ahead of local level, offering benefits to the rest of society (Blokland, 2007). The greater part of FPOs in India grow high value crops; other important crops are soybeans, cotton and nuts like coconut, cashew, and groundnut; fruits and vegetables having good markets and export potential. A majority of FPOs in the country are functioning for less than two years and mainly dealing with high value crops like fruits and vegetables. These organizations primarily deal with marketing and input supply services but after their success they tend to widen their market opportunities by entering into processing and value addition. (Venkattakumar et al. (2019). Around 25 per cent of FPOs are engaged in postharvest processing and about 20 per cent apply organic production methods (Trebbin, 2014). There were totally 273 farmer producer companies in Telangana state NABARD (2018-19). Among these 72 FPOs formed under PRODUCE fund of NABARD were

taken into consideration as they were functioning over five years. Among the 72 FPOs Medak district is having the highest number and was selected purposively for the study.

The main objective of the study is to assess and compare the performance of the selected FPOs. Measuring the performance of the FPOs, is one of the criteria by which the effectiveness of an organization, institution or a group is measured. Bernard et al. (2008) defined the performance of village organizations as the "effectiveness of serving their members," which they measured by the percentage of members who are said to have benefited from these organizations.

Methodology

An ex-post-facto research design was adopted for the study conducted in the year 2019-2020. Three FPOs were selected randomly from three different promoting institutes working in Medak district i.e. Suraksha Farmers Producer Company Ltd (SFPCL) promoted by Centre for Sustainable Agriculture (CSA) an independent research organization Marpalli Kisan Kranthi Producer Company Ltd (MKKPCL) promoted by Vrutti NGO and Siddipet Kisan Agro Farmers Producer Company Ltd (SKAFPCL) promoted by the International Crops Research Institute for the Semi-arid Tropics (ICRISAT). From each of the selected FPOs, thirty farmers were selected by following random sampling procedure. The sample constituted a total of 90 producer members.

Based on a review of literature and discussion with experts, a list of indicators relevant to measure the performance of FPOs was prepared. The experts were requested to indicate whether each of the indicators selected was relevant and suitable for inclusion in the Index to measure performance of FPOs. They were also requested to add new indicators if any to measure the performance. The responses were received from 30 judges and were quantified for calculation of relevancy scores which ranged from 0.58 to 0.91 and the details are furnished here under.

Table 1. Relevancy Rating Score for the Indicators to Measure Performance of FPOs

Indicator	Score
Marketing services	0.91
Financial services	0.83
Group leadership	0.72
Social factors	0.76
Technical services	0.85
Group decision making	0.58
Group cohesiveness	0.74
Networking services	0.85
Input supply services	0.88
Infrastructure support	0.73

The indicators which got a relevancy rating of 0.80 above (more than 80% of the judges indicating the relevancy of the indicators) were selected for the study. The same indicators were selected to study the performance of FPOs i.e. Technical services, Input supply services, Marketing services, Networking services and financial services.

Each indicator to study performance consisted of unequal number of statements and hence their range of scores was different and therefore, the scores of all the five indicators were normalized by using the following formula.

$$Uij = \underbrace{Yij - Minyi}_{Max.yi - Min yj}$$

Where,

Uij = Unit score of the ith respondents on jth component

Yij = Value of ith respondent on the jth component

Maxyj = Maximum score on the jth component

Minyj = Minimum score on the jth component

The score of each component ranged from 0 to 3 i.e. when Y^{ij} is minimum the score is 0 and when Y^{ij} is maximum the score is 3.

$$PI ext{ of } FPO = SI1+SI2+SI3+SI4+SI5}$$

5

Where,

PI= Performance Index

SI 1 = Normalized indicator value of technical services

SI 2 = Normalized indicator value of input supply services

SI 3 = Normalized indicator value of marketing services

SI 4 = Normalized indicator value of networking services

SI 5 = Normalized indicator value of financial services

The obtained index value ranged from 0 to 1. Based on these index values the FPOs were classified into different levels of performance i.e. poor performance, average performance, good performance and excellent performance based on the range value obtained. The respondents were classified into four categories by adopting inclusive class intervals as mentioned below.

Category	Index value
Poor performance	0.42-0.51
Average performance	0.51-0.60
Good performance	0.60-0.68
Excellent performance	0.68-0.75

Results and Discussion

The data was collected from the members on the selected indicators of performance of the FPOs in order to assess and compare the services provided by the FPOs to their members and to evaluate their performance in terms of the selected indicators.

Indicators of performance : The respondents of FPOs were grouped into three categories based on their perception about the performance of FPOs measured with the help of different indicators. The results are presented here under.

Table 2. Distribution of Members Based on Responses on Technical Services of FPOs (N = 90)

Category	SFPCL		MKKPCL		SKAFPCL		Total	
	No.	%	No.	%	No.	%	No.	%
Poor (9-12)	10	33.33	17	56.67	6	20.00	33	36.67
Av. (12-15)	14	46.67	11	36.67	16	53.33	41	47.78
Good (15-18)	6	20.00	2	6.67	8	26.67	16	17.78
Total	30	100	30	100	30	100	90	100

Technical services: On perusal of Table 2, it is evident that a majority (47.78%) of the respondents perceived the technical services provided by all FPOs were average followed by poor (36.67%) and good (17.78%). FPO wise categorization showed that in SFPCL majority (46.67%) of the respondents perceived technical services provided by the FPO were average followed by poor (33.33%) and good (20.00%) whereas in case of MKKPCL it was noticed that as many as half (56.67%) of the respondents perceived technical services provided by FPO were poor followed by average (36.67%) and good (6.67%). In case of SKAFPCL it was revealed that a majority (53.33%) of respondents perceived technical services provided by the FPO were average followed by good (26.67%) and poor (20.00%).

From the above results it can be concluded that a majority of the respondents perceived technical services provided by FPO were average in the FPOs promoted by ICRISAT and CSA whereas it was poor in the FPO promoted by Vrutti NGO.

The probable reason for this kind of distribution might be because members of both ICRISAT and CSA FPOs received information on agro advisories and meetings on a regular basis where as in the FPO promoted by Vrutti NGO, due to their insufficient staff and non-collaboration with experts in technical aspects of agriculture in their organization, members perceived the services were poor. The results were in conformity with Rani et al. (2014).

Table 3. Distribution of Members Based on Responses on Input Services Indicator of FPOs (N = 90)

Category	SFPCL		MKKPCL		SKAFPCL		Total	
	No.	%	No.	0/0	No.	%	No.	%
Poor (9-12)	11	36.67	15	50.00	6	20.00	32	35.55
Av. (12-15)	13	43.33	12	40.00	16	53.33	41	47.78
Good (15-18)	6	20.00	3	10.00	8	26.67	17	18.89
Total	30	100	30	100	30	100	90	100

Input supply services : A perusal of Table 3 revealed that a majority (47.78%) of the respondents perceived input supply services provided by all FPOs were average followed by poor (35.55%) and good (18.89%). FPO wise categorization showed that in SFPCL majority (43.33%) of the respondents perceived input supply services were average followed by poor (36.67%) and good (20.00%) whereas in case of MKKPCL it was observed that as many as half (50.00%) of the respondents perceived input supply services were poor followed by average (40.00%) and good (10.00%). In SKAFPCL it was revealed that majority (53.33%) of the respondents perceived input supply services were average followed by good (26.67%) and poor (20.00%).

From the above results (Table 3) it can be seen that input supply services provided were average in the FPOs promoted by ICRISAT followed by CSA whereas it was poor in the FPO promoted by Vrutti NGO. The probable reason for this kind of distribution might be because in SKAFPCL leadership is dynamic and member driven and always caters to needs of members, whereas in SFPCL due to their motto to promote organic farming, supply of chemical fertilizers and pesticides is not encouraged and in MKKPCL it was poor due to weak leadership and members inability to support FPO financially in order to procure inputs in bulk. The results were in conformity with Patkar et al. (2012) and Singh (2012).

Table 4. Distribution of Members Based on Responses on Marketing Services of FPOs (N = 90)

Category	SFPCL		MKKPCL		SKAFPCL		Total	
	No.	%	No.	%	No.	%	No.	%
Poor (10-12)	13	43.33	18	60.00	6	20.00	37	41.11
Av. (12-14)	12	40.00	10	33.33	11	36.67	33	36.67
Good (14-16)	5	16.67	2	6.67	13	43.33	20	22.24
Total	30	100	30	100	30	100	90	100

Marketing services: A perusal of Table 4, revealed that a majority (41.11%) of the respondents perceived marketing services (dissemination of market information, marketing of produce, linking with markets) provided by all FPOs were poor followed by average (36.67%) and good (22.24%). FPO wise categorization showed that in SFPCL majority (43.33%) of the respondents perceived marketing services provided were poor followed by average (40.00%) and good (16.67%) whereas in case of MKKPCL it was revealed that as many as 60 per cent of the respondents perceived marketing services provided were poor followed by average (33.33%) and good (6.67%). SKAFPCL revealed that a majority (43.33%) of the respondents perceived marketing services provided were good followed by average (36.67%) and poor (20.00%).

It can be observed from Table 4 that a majority of the respondents perceived marketing services provided were good in the FPO promoted by ICRISAT whereas it was poor in FPOs promoted by CSA and Vrutti NGO. The probable reason for this kind of distribution might be because ICRISAT facilitated the FPO in connecting with the buyers through their agri innovation park and 36.67 per cent of the members perceived the services to be average as the FPO was not procuring their entire produce. In the case of SFPCL the services were perceived poor to average as only organic produce was marketed by the FPO with the help of market facilitated by CSA therefore neglecting the produce of non organic cultivators. This finding indicated that overall in FPOs, marketing of members produce is poor and FPOs are in need of help from organizations to connect them to buyers. The results were in conformity with Kandeeban et al. (2017).

Networking services : Perusal of Table 5, revealed that a majority (44.45%) of the respondents perceived the networking services facilitated by all FPOs were average followed by poor (36.67%) and good (18.89%). FPO wise categorization showed that in SFPCL, 50 per cent of the respondents perceived the networking services facilitated were average followed by poor (30.00%) and good (20.00%) whereas in case of MKKPCL it was observed that as many as half (56.67%) of the respondents perceived the networking services facilitated were poor followed by average (36.67%) and good (6.67%) whereas in case of SKAFPCL majority (46.67%) of the respondents perceived the networking services facilitated were average followed by good (30.00%) and poor (23.33%).

Total

	(/						
Category	SFPCL		MKKPCL		SKAFPCL		Total	
	No.	%	No.	0/0	No.	%	No.	%
Poor (9-11)	9	30.00	17	56.66	7	23.33	33	36.67
Av. (11-13)	15	50.00	11	36.66	14	46.67	40	44.45
Good (13-15)	6	20	2	6.67	9	30.00	17	18.89

100

30

100

90

100

30

30

100

Table 5. Distribution of Members Based on Responses on Networking Services of FPOs (N = 90)

From the above (Table 5) results it was observed that majority of the respondents perceived networking services provided by the FPO were average in the FPOs promoted by ICRISAT and CSA whereas it was poor in Vrutti NGO promoted FPO. The probable reason for this kind of distribution might be because both ICRISAT and CSA facilitated the FPOs by connecting to different departments of agriculture and allied sectors as they themselves have good connections with the respective departments whereas in case of MKKPCL, it is located far from research centers, district headquarters and Hyderabad.

Financial Services: Perusal of Table 6. revealed that a majority (52.22%) of the respondents perceived the financial services provided by all FPOs were poor followed by average (34.44%) and good (13.33%). FPO wise categorization showed that in SFPCL half of the (50.00%) respondents perceived the financial services provided were poor followed by average (36.67%) and good (13.33%). On the other hand in case of MKKPCL it was noticed that as many as 66.67 per cent of the respondents perceived the financial services provided were poor followed by average (26.67%) and good (6.67%). SKAFPCL revealed that 40 per cent of the respondents equally perceived the financial services provided were poor and average followed by good (20.00%).

Table 6. Distribution of Members Based on Responses on Financial Services of FPOs (N = 90)

Category	SFPCL		MKKPCL		SKAFPCL		Total	
	No.	%	No.	0/0	No.	%	No.	%
Poor (5-7)	15	50.00	20	66.67	12	40.00	47	52.22
Av. (7-9)	11	36.67	8	26.66	12	40.00	31	34.44
Good (9-11)	4	13.33	2	6.67	6	20.00	12	13.33
Total	30	100	30	100	30	100	90	100

It can be inferred from the above results that majority of the respondents perceived financial services provided by the three FPOs were poor. The probable reason for this kind of distribution might be because the FPOs were not having strong financial base to provide loans and also less financial contribution from members.

Overall Performance of the selected FPOs: Based on the performance indicators the FPOs were categorized into four categories namely poor, average, good and excellent by using indicator wise total scores obtained on Performance Index. The results are presented in Table 7.

Table 7. Distribution of FPOs Based on their Performance as Perceived by the Respondents (N = 90)

Category	SFPCL		MKKPCL		SKAFPCL		Total	
	No.	%	No.	%	No.	%	No.	%
Poor (0.42-0.51)	9	30.00	16	53.33	5	16.67	30	33.33
Av. (0.51-0.60)	13	43.33	9	30.00	9	30.00	31	34.44
Good (0.60-0.68)	7	23.33	5	16.67	13	43.33	25	27.77
Excellent (0.68-0.75)	1	3.33	0	0	3	10.00	4	4.44
Total	30	100	30	100	30	100	90	100

An overview of Table 7. revealed that a majority (34.44%) of respondents perceived the performance of FPOs as average, followed by poor (33.33%), good (27.77%) and excellent (4.44 %).

FPO wise categorization revealed that 43.33 per cent of respondents in SFPCL perceived the performance of FPO as average followed by poor (30.00%), good (23.33%) and excellent (3.33%) whereas in case of MKKPCL majority (53.33%) of respondents perceived the performance of FPO as poor followed by average (30.00%) and good (16.67%). In case of SKAFPCL the respondents (43.33%) perceived the performance of FPO as good followed by average (30.00%), poor (16.67%) and excellent (10.00%).

From the above results, it could be concluded that SFPCL was rated as average whereas, MKKPCL as a poor performing FPO and SKAFPCL as a good performing FPO. This can be attributed to the institutional support received by the FPOs from their POPIs. Overall, the performance of FPOs was average to poor. This was due to insufficient knowledge on the business concept of FPOs among farmers and their inability to generate capital to carry out activities and provide services to their members.

FPO wise performance revealed that the FPO promoted by the ICRISAT was perceived as a good performing FPO to average which signifies their high external linkages, group leadership, high frequency of group participation, team spirit, training opportunities which helped the FPO to perform better as compared to other FPOs promoted by CSA and Vrutti. In case of the FPO promoted by Vrutti NGO the poor performance could be attributed to their poor leadership, group participation, team spirit and training opportunities. The performance of the FPO promoted by CSA was found to be average to poor, which could be because of their poor leadership abilities, team spirit and group participation, high cohesiveness among members and their restriction to limit their services focusing on organic farming. Singh et al (2021) reported that, from the overall response of the respondents of functional as well as non-functional FPOs a large majority agreed that FPOs reduce input cost, work for skill development and capacity

building, generate managerial and leadership qualities, generate employment opportunities and transform traditional agriculture into business corporation etc. by which we can conclude that proper orientation programmes about the concept and functioning of the FPOs will motivate and attract other farming communities.

Performance of selected FPOs: In the present study, to know the variation in performance of selected FPOs analysis of variance (ANOVA) was used. Through this, the variation in performance of three FPOs was studied.

The calculated F value (7.53) was higher than the table value (3.46). The F value was significant at 0.05 level of probability. Hence, the empirical hypothesis was accepted and null hypothesis rejected. Therefore, it could be concluded that there was a significant difference between the mean level of performance of FPOs by three different promoting agencies.

Table 8. Analysis of Variance of Performance of Selected FPOs (N = 90)

Category	Mean values		F cal	F	
	SFPCL	MKKPCL	SKAPCL	value	tab
Performance	2.0	1.6	2.5	7.53*	3.46

^{*}Significant 5% at level of significance

From the mean value it can be inferred that SKAPCL and SFPCLwere performing well compared to MKKPCL. The difference in performance could be attributed to the promoting agencies extent of contribution and their support to the FPOs by providing them with trainings on record maintenance, building market, identifying buyers and attracting members along with facilitating forward and backward linkages. It was possible as the experts are well versed with knowledge on FPOs were present within the organization which was visible from the above results in the various services provided by the FPOs.

Conclusion

The difference in performance could be attributed to the promoting agencies extent of contribution and their support to the FPOs by providing them with trainings on record maintenance, building market, identifying buyers and attracting members along with facilitating forward and backward linkages. There is a need for a greater recognition of the importance of linking with other actors who are potential sources of services, information, technical support and market outlets. More importantly, from the supply side, strengthening the capacity of service providers and external actors (government, NGO, church- based, and private sector) will be needed to complement strategies supporting linkages.

References

- Anonymous (2019). Farmer producers' organisations supported by NABARD. Available from https://www.nabard.org/auth/writereaddata/File/Farmer%20Producers, Accessed on 15th August 2019.
- Anonymous (2019). The World Bank in India. https://www.worldbank.org/en/country/india/overview.
- Blokland, K.; Goue, T.C. (2007). Farmers' peer-to-peer support path to economic development. Producer organizations and market chains. Facilitating trajectories of change in developing countries 71-88.
- Bernard, T.; Collion, A.; Rondot, P. (2008). Do village organizations make a difference in African rural development? Astudy for senegal and burkina faso. World Dev., 36(11), 2188-2204.
- Kandeeban, M and Prabhavathi, Y. (2017). Marketing efficiency and market competitiveness of farmer produce companies (FPC's) A case study of Telangana and Karnataka states. The J. of Res. ANGRAU, 45(2): 100-107.
- Patkar, S.; Asthana, S.; Arya, S.; Natawidjaja, R.; Widyastuti, C. and Shenoy, S. (2012). Small scale farmers' decisions in globalised markets: Changes in India, Indonesia and China, IIED/HIVOS/ Mainumby, London/The Hague/La Paz.
- Rani, C.R and Reddy, A.A. (2014). Producer organisations in Indian agriculture: Their role in improving services and intermediaries. South Asian Res., 34 (3): 209-224.

- Singh, S. (2012). New markets for smallholders in India-exclusion, policy and mechanisms. Eco. and Pol. weekly, 47 (52): 95-10 Singh, Devinder Tiwari and Singh, Gurmeet (2021). Attitude of the farmers towards farmer producer organisations (FPOs) in Punjab. Indian Res. J. of Ext. Edu., 21 (2&3): 42-45.
- Trebbin, A. (2014). Linking small farmers to modern retail through producer organizations - experiences with producer companies in India. Food Policy, 45: 35-44.
- Venkattakumar, R.; Venugopalam, S.; Narayanaswamy, B and Balakrishna, B. (2019). Performance of farmer producer organizations (FPOs and associated factors in Karnataka): producers' perspective. Indian Res. J. of Ext. Edu., 19 (2&3): 7-12.