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Farmers Perception on the Services of Farmer Producer Organisations (FPOs) in Anantapuram District of Andhra Pradesh

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ABSTRACT

A study was conducted during September, 2020 to August, 2022 in the Anantapuramu district of Andhra Pradesh, India to analyze the farmers perception on the services of Farmer Producer Organizations (FPOs). Five FPOs namely Sri Venkateswara Swamy FPO, Sri Peddamma Thalli FPO, Sri Ramaswamy FPO, Narpala Rythunestam FPC ltd and Tadipatri Horticulture FPO were selected randomly as they are actively functioning in the district. An interview schedule was developed to collect the information from selected FPOs through purposive cum simple random sampling. From each FPO, fifteen farmer members were randomly selected and thus, comprising a sample size of 75 farmers from five FPOs. The findings of the study revealed that the majority of the members (64%) had perceived that FPOs performance with respect to their input services was medium, whereas 72% of them had agreed with respect to technical services as medium. With respect to financial services, 62.67% members perceived that FPOs performance was medium, more than half of the members (54.67%) had consented to marketing services as medium and more than 62.67% agreed with the processing and value addition services as medium. In respect to all the services, 65.33% agreed with the performance of FPOs was proved as medium whereas 18.67% of members had received high level of services and 16% of members found it as low.

KEYWORDS: Financial, inputs, marketing, processing, services, technical, value addition

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1. INTRODUCTION

The concept of group approach in farming is not objectively new in India, but it has evolved through the years into various forms (Agarwal, 2018). Groups have been set up by farmers or primary producers to achieve specific goals and objectives of their group efforts. Farmers Producers Organizations (FPOs) are considered to be one of the most imminent tools of intervention for upliftment of the farmers' condition in India. When more than 85 per cent of the farmers are smallholders, it becomes quite challenging for them to access the modern production technologies, access and use the market information for their advantage, transact the commodities in input or output market on their own terms, and ultimately keep their farming profitable (Ranjit et al., 2022). The collectivization of farmers through FPOs help in bringing economy of scale in different on-farm as well as off-farm activities at all three stages- pre-production, production and post-production levels. Farmers Producers Organizations (FPOs) is the emerging paradigm for social engineering of farmers into organized groups, so that they can collectively involve in agricultural supply and value-chain operations (Adhikari et al., 2021). FPOs provide additional effectiveness for small and marginal farmers to compete in the agricultural market, which helps to reduce transaction costs, inputs cost, enhance the input accessibility, increase outputs, access market information, access to new innovative and feasible technology, rolling into high-priced markets and allowing them to get high prices (Sunil et al., 2021). FPOs have gained attention as a solution to the challenges faced by small farmers in marketing (Singh et al., 2022) and it was found to improve the livelihood of farmers by collectivizing them for input purchase and providing forward and backward linkages (Mukherjee et al., 2018). Hence, the number of FPO is increasing over the year. Currently, there are 33,711 registered FPOs in India, with over 28.20 lakh farmers affiliated across 28 states and 7 Union Territories (Balamatti, 2023; Kumar et al., 2023). FPOs provide farmers with benefits such as risk mitigation, access to extension services, improved inputs, credit, storage, and processing facilities. They enable farmers to compete with larger corporations, utilize digital platforms, and share profits (Rathour et al., 2022).

Majority of FPOs in the country are functioning for less than two years and were 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 processing and value addition (Venkattakumar et al., 2019). Backward linkage having provision for seeds, fertilizer, pesticide, extension and other advisory service, credit and insurance; and forward linkage having provision for collective marketing, processing, and market-led agriculture production are the basic purpose envisioned for the FPO. It means more the number of farmers mobilized, better will be the performance of FPO. Additionally, the members will have increase in income as they will have access to better advisory services, machinery and input at lower cost (Mukherjee et al., 2020). The government can take steps to mobilize young and educated farmers who can actively participate in FPOs. The FPOs strengths realized members utilize the opportunity in decision making and move forward towards better standard of living. The unique interventions of the FPOs may be extracted and popularized for adoption by other FPO's as well (Amitha et al., 2021). SFAC is the nodal agency coordinate the between the states and single window for the technical advice and investment needs. Producer Organization Development Fund (PODF) has been created by NABARD to specially promote the FPOs which lies outside the ambit of SFAC. As a major reform, GOI has announced cent percent tax holiday for all the FPOs below 100 crores up to five years (Manaswi et al., 2018).

FPOs have successfully acted as a platform to empower member farmers by increasing their competitiveness and providing emerging market opportunities (Mukherjee et al., 2019). Manaswi et al. (2019) suggested that the states should engage a greater number of FPOs promoting institutions to improve their performance. The farmers need to be sensitized to become members of FPOs and at the same time FPOs should open their offices and intervention facilities in villages so as to have mutual affinity for sustenance. To date, numerous studies have explored the efficacy of various agricultural-based FPOs across different sectors of agriculture. However, there remains a notable research gap pertaining to the performance of FPOs in extending the broad-based extension services to its farmer members.

Hence, a comprehensive investigation on the Farmer Producer Organisations (FPOs) services is need of the hour for FPO sustainability. On this backdrop, the present study was undertaken with the objective of assessing the farmers perception on the services of Farmer Producer Organisations (FPOs) in Anantapuramu District of Andhra Pradesh.

2. MATERIALS AND METHODS

An ex-post-facto research design was adopted for the study conducted during the period from September, 2020 to August, 2022. The study was conducted in the purposively selected Anantapuramu district of Andhra Pradesh. Anantapuramu, one of the districts of southwestern part of Andhra Pradesh, lies approximately between 14.68° North Latitudes and 77.63° West longitude. The list comprising of 90 well established, registered and functioning FPOs in Anantapuram district of Andhra Pradesh was obtained from the National Bank for Agriculture and Rural

Development (NABARD), Krishi Vigyan Kendra (KVK) and Non-Governmental Organisations. Out of these, a total of five FPOs namely Sri Venkateswara Swamy FPO, Sri Peddamma Thalli FPO, Sri Ramaswamy FPO, Narpala Rythunestam FPC ltd and Tadipatri Horticulture FPO were selected randomly, which were dealing with agricultural and horticultural produce and existing for a period of more than 5 years. From each FPO, fifteen farmer members were randomly selected and thus, comprising a sample size of 75 farmers from Five FPOs. A structured data collection tool was utilized to collect the data from the producer members (75) of FPOs.

Based on review of literature and discussion with experts, a list of services provided by FPOs considered as indicators to measure performance of FPOs was prepared. They were also requested to add new services/indicators if any which tend 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 0.86, the details were furnished here under (Table 1).

Table 1: Relevancy rating score for the services provided by FPOs to measure its performance

Services provided by FPOs	Score
Marketing services	0.90
Financial services	0.88
Group leadership	0.68
Social factors	0.75
Technical services	0.86
Group decision making	0.58
Group cohesiveness	0.74
Networking services	0.77
Input services	0.89
Infrastructure support	0.73
Processing and Value addition services	0.84

The services which got relevancy rating 0.80 above (more than 80% of the judges indicating the relevancy of the indicators) were selected for the study. Some indicators were selected to study the performance of FPOs i.e., Input services, technical services, Marketing services, financial services and Processing and value addition services. Under each selected service, respondents were given the statements related to that particular service provided by FPOs to rate their level of perception.

Based on the farmer member responses towards selected FPO services, the respondents were grouped into three categories *i.e.,* High, Medium and Low using Mean and Standard Deviation as measure of check (Table 2).

Table 2: Categorisation of respondents based on their perception towards FPOs performance

Sl. No.	Category	Range
1.	Low	<Mean-SD
2.	Medium	Mean-SD to Mean+SD
3.	High	>Mean+SD

3. RESULTS AND DISCUSSION

The completed and returned questionnaires from FPO farmer members revealed the distribution of respondents based on their perception towards the services delivered by FPOs to its farmer members.

3.1. Input services

The data presented in the table 3 shows the list of various input services provided by the FPOs and ranking of those services as perceived by the farmer members of the FPOs. The results revealed that most of the member farmers (46.67% excellent and 28.00% good) perceived that the timely provision of quality seeds was the first ranked input service with a weighted mean score of 20.80 among the list of various input services. It implies that FPOs play a crucial role in facilitating quality seed to their farmer members through quality seed production, seed procurement, quality assurance and certification. FPOs act as intermediaries and facilitators, ensuring that their farmer members have access to quality seeds, information and support. Majority of the farmer members (42.67% excellent and 30.00% good) perceived that the FPOs were serving their members with quality inputs which was ranked second with weighted mean score of 20.60 and regular supply of inputs as third ranked service (weighted mean score 19.00) followed by other input services in order of importance. It implies that, FPOs continuous engagement with government agencies and other stakeholders helps create an enabling environment for the production and distribution of high-quality agricultural inputs among their farmer members. FPOs advocate for policies that support the availability and affordability of quality inputs, ensuring that farmers have access to essential resources for successful and sustainable agricultural practices. Generally, FPOs have strong backward and forward linkages with various stakeholders. This helps in better accessibility of input services to their members (Nikam, 2019).

The data presented in the table 4 shows the distribution of farmer members based on their level of perception towards various input services received by the FPOs. The data indicates that the majority (64%) of the members had perceived medium level of input services from the FPOs, while 22.67% of members had perceived high level of input services and 13.33% of members perceived low level of input

Table 3. Ranking of the input services as perceived by the farmer members of the FPOs

Sl. No.	I. Input services	Respondents Distribution (n =75)					Weighted mean	Rank
		5 (E)	4 (G)	3 (A)	2 (P)	1 (VP)		
1.	Seeds	35 (46.67)	21 (28.00)	15 (20.00)	4 (5.33)	0 (0)	20.80	1
2.	Fertilizers	20 (26.67)	18 (24.00)	20 (26.67)	13 (17.33)	4 (5.33)	17.47	7
3.	Bio fertilizers	10 (13.33)	13 (17.33)	23 (30.67)	17 (22.67)	12 (16.00)	14.47	10
4.	Micro nutrients	15 (20.00)	16 (21.33)	20 (26.67)	13 (17.33)	11 (14.67)	15.73	8
5.	Plant protection chemicals	27 (36.00)	18 (24.00)	16 (21.33)	9 (12.00)	5 (6.67)	18.53	4
6.	Equipment and machinery	17 (22.67)	16 (21.33)	15 (20.00)	14 (18.67)	13 (17.33)	15.67	9
7.	Other accessories (pump sets, drip and pipe lines)	13 (17.33)	10 (13.33)	9 (12.00)	18 (24.00)	25 (33.33)	12.87	11
8.	Timely supply of inputs	23 (30.67)	20 (26.67)	17 (22.67)	13 (17.33)	2 (2.67)	18.27	5
9.	Reasonable cost of inputs	22 (29.33)	17 (22.67)	18 (24.00)	13 (17.33)	5 (6.67)	17.53	6
10.	Quality of inputs	32 (42.67)	24 (32.00)	15 (20.00)	4 (5.33)	0 (0)	20.60	2
11.	Regular supply of inputs	28 (37.33)	19 (25.33)	18 (24.00)	5 (6.67)	5 (6.67)	19.00	3

Frequency and percentage in parenthesis; E: Excellent; G: Good; A: Average; P: Poor; VP: Very Poor

Table 4: Distribution of members on the basis of perception towards input services

Sl. No	Category	Respondents (n=75)	
		Frequency	%
1.	Low (<31.52)	10	13.33
2.	Medium (31.52 – 36.84)	48	64.00
3.	High (>36.84)	17	22.67
Total		75	100.00

services from the FPOs. The probable reasons for this kind of distribution might be because majority of the FPOs provide various kinds of input services to their members like seed, fertilizers, bio-fertilizers, micro-nutrients, farm implements and plant protection chemicals etc., and the level of input services provided to their members varied depending on the resource availability, size and scale of FPO, geographical location of the FPO, market linkages, infrastructure, government support and the proactive involvement of farmer members and leadership. Hence, majority of the farmer members perceived that, medium level of input services. The results were in conformity with Sanjiv et al. (2023).

3.2. Technical services

The data presented in the table 5 shows the list of various technical services provided by the FPOs and ranking of those services as perceived by the farmer members of the FPOs. The results revealed that the most of the member farmers (44% excellent and 30.67% good) perceived that the timely and need based information on crop management aspects and improved varieties was the first ranked technical service with a weighted mean score of 20.67 among the list of various technical services. Majority of the farmer members (48.00% excellent and 26.67% good) perceived that the FPOs were imparting knowledge on crop production technologies which was ranked second with weighted mean score of 20.60 and knowledge on quality seed production as third ranked technical service (weighted mean score 18.53) followed by other technical services in order of importance. It implies that, FPOs play a pivotal role in disseminating information on crop management aspects and improved varieties by acting as conduits for knowledge transfer,

Table 5: Ranking of the technical services as perceived by the farmer members of the FPOs

Sl. No.	II. Technical services	Respondents Distribution (n =75)					Weighted mean	Rank
		5 (E)	4 (G)	3 (A)	2 (P)	1 (VP)		
1.	Information on crops / improved varieties	33 (44.00)	23 (30.67)	15 (20.00)	4 (5.33)	0 (0)	20.67	1
2.	Production technology	36 (48.00)	20 (26.67)	11 (14.67)	8 (10.67)	0 (0)	20.60	2
3.	Resource conservation technology	18 (24.00)	13 (17.33)	15 (20.00)	17 (22.67)	12 (16.00)	15.53	12
4.	Crop diversification	15 (20.00)	16 (21.33)	20 (26.67)	12 (16.00)	12 (16.00)	15.67	11
5.	Seed production	27 (36.00)	18 (24.00)	16 (21.33)	9 (12.00)	5 (6.67)	18.53	3
6.	Facilitation of production activities	19 (25.33)	16 (21.33)	15 (20.00)	14 (18.67)	11 (14.67)	16.20	9
7.	Production clusters development	22 (29.33)	15 (20.00)	14 (18.67)	13 (17.33)	11 (14.67)	16.60	7
8.	Alternative farming system development	17 (22.67)	16 (21.33)	23 (30.67)	11 (14.67)	8 (10.67)	16.53	8
9.	Post-harvest management	18 (24.00)	13 (17.33)	16 (21.33)	18 (24.00)	10 (13.33)	15.73	10
10.	By product utilization	19 (25.33)	23 (30.67)	14 (18.67)	15 (20.00)	4 (5.33)	17.53	5
11.	Need based training programs for members	22 (29.33)	19 (25.33)	18 (24.00)	8 (10.67)	8 (10.67)	17.60	4
12.	Skill improvement activities	14 (18.67)	14 (18.67)	15 (20.00)	18 (24.00)	17 (22.67)	14.13	15
13.	Facilitation of kisan melas, exposure visits, field trips	18 (24.00)	16 (21.33)	19 (25.33)	17 (22.67)	5 (6.67)	16.67	6
14.	Farm publication support	14 (18.67)	15 (20.00)	13 (17.33)	23 (30.67)	10 (13.33)	15.00	13
15.	Agro advisory services	15 (20.00)	26 (34.67)	12 (16.00)	17 (22.67)	5 (6.67)	14.93	14

Frequency and percentage in parenthesis; E: Excellent; G: Good; A: Average; P: Poor; VP: Very poor

providing training and support services, and fostering a sense of community among farmers. This collaborative approach contributes to the overall development and sustainability of agriculture at the grassroots level. One of the important aspects of FPOs is to build the capacity of its members in different business prospective agricultural arenas. Training and capacity development of the member farmers continues to be a striving force behind its sustainability and profit maximization (Venkattakumar and Sontakki, 2012; Bikkina, 2015).

The data presented in the table 6 shows the distribution of farmer members based on their level of perception towards various technical services received by the FPOs.

Table 6: Distribution of members on the basis of perception towards technical services

Sl. No.	Category	Respondents (n=75)	
		Frequency	%
1.	Low (<21.53)	11	14.67
2.	Medium (21.53 – 24.54)	54	72.00
3.	High (>24.54)	10	13.33
Total		75	100.00

The data indicates that the majority (72%) of the members had perceived medium level of technical services from the FPOs, while 14.67 % of members had perceived low level

of technical services and 13.33% of members perceived high level of technical services from the FPOs. The probable reasons for this kind of distribution might be because many FPOs are formed by small and marginal farmers who do not have extensive technical knowledge or access to trained agricultural experts. This lack of technical expertise within the FPO leadership and membership can restrict their ability to offer high-level technical services. FPOs that prioritize training and capacity-building programs can enhance their technical capabilities over time. Collaborations with agricultural universities, research institutions, NGOs, and private sector entities can enhance the technical capabilities of FPOs. FPOs that embrace modern agricultural practices, innovative farming techniques, and sustainable technologies may offer higher levels of technical services to their members. However, if these efforts are insufficient or not well-implemented, it may result in a medium level of technical services. Hence, majority of the farmer members perceived that, medium level of technical services. Exposure visits to different farms and technology demonstrations add to their existing knowledge and help to make it more rational (Nikam, 2019).

3.3. Financial services

The data presented in the table 7 shows the list of various financial services provided by the FPOs and ranking of those services as perceived by the farmer members of the FPOs. The results revealed that the most of the member farmers (44.00% excellent and 30.67% good) perceived that the provision of credit facilities was the first ranked financial service with a weighted mean score of 20.67 among the list of various financial services. Majority of the farmer members (36.00% excellent and 24% good) perceived that the FPOs were raising funds from one or other agencies to meet their financial needs was ranked second with weighted mean score of 18.53 and convergence of funds as third ranked financial service (weighted mean score 18.53) followed by other financial services in order of importance. It implies that, FPOs play an important role in providing financial services to farmer members by facilitating access to credit, promoting savings, microfinance, enabling insurance coverage, supporting input financing, and enhancing financial literacy. These efforts contribute to the economic empowerment and financial well-being of farmers and enhancing their capacity to invest in and expand their agricultural activities. Now a days with technological advancement most of the FPCs have a digital, quick and transparent payment system and provide timely payments to their members of their agricultural produces (Paty, 2018; Venkatesan, 2020).

Table 7: Ranking of the financial services as perceived by the farmer members of the FPOs

Sl. No.	III. Financial services	Respondents distribution (n =75)					Weighted mean	Rank
		5 (E)	4 (G)	3 (A)	2 (P)	1 (VP)		
1.	Credit facilities	33 (44.00)	23 (30.67)	15 (20.00)	4 (5.33)	0 (0)	20.67	1
2.	Providing subsidies	19 (25.33)	23 (30.67)	14 (18.67)	14 (18.67)	5 (6.67)	17.47	5
3.	Crop insurance facilities	18 (24.00)	13 (17.33)	15 (20.00)	17 (22.67)	12 (16.00)	15.53	7
4.	Convergence of funds	22 (29.33)	19 (25.33)	18 (24.00)	8 (10.67)	8 (10.67)	17.60	3
5.	Ways of raising funds	27 (36.00)	18 (24.00)	16 (21.33)	9 (12.00)	5 (6.67)	18.53	2
6.	Obtaining grants from various sources	22 (29.33)	17 (22.67)	18 (24.00)	13 (17.33)	5 (6.67)	17.53	4
7.	Dovetailing of Govt. Schemes	18 (24.00)	13 (17.33)	16 (21.33)	17 (22.67)	11 (14.67)	15.67	6

Frequency and percentage in parenthesis; E: Excellent; G: Good; A: Average; P: Poor; VP: Very Poor

The data presented in the table 8 shows the distribution of farmer members based on their level of perception towards various financial services received by the FPOs. The data indicates that the majority (62.67%) of the members had perceived medium level of financial services from the FPOs, while 20% of members had perceived high level of financial services and 17.33% of members perceived low level of financial services from the FPOs. The probable reasons for this kind of distribution might be because many FPOs, especially those formed by small and marginal farmers, may face challenges in accessing capital, often operate

Table 8: Distribution of members on the basis of perception towards financial services

Sl. No.	Category	Respondents (n=75)	
		Frequency	%
1.	Low (<17.34)	13	17.33
2.	Medium (17.34 – 19.83)	47	62.67
3.	High (>19.83)	15	20.00
Total		75	100.00

with limited financial resources of their own. They may be cautious about taking on financial risk, especially if they lack experience or resources for proper risk assessment and mitigation and they may also face challenges in establishing banking relationships and accessing financial services for themselves and their members. Meeting the legal requirements for financial intermediaries can be complex and demanding, which can deter some FPOs from engaging in financial activities. Without sufficient financial resources, FPOs may struggle to offer extensive financial services to their members. Hence, majority of the farmer members perceived that, medium level of financial services. FPCs are based on collective action approach, so due to collectivization, the purchasing power of individual farmers was enhanced (Latynskiy and Thomas, 2016).

3.4. Marketing services

The data presented in the table 9 shows the list of various marketing services provided by the FPOs and ranking of those services as perceived by the farmer members of the FPOs. The results revealed that the majority of the farmer members (44.00% excellent and 30.67% good) perceived that the collective sale of farm produce was the first ranked marketing service with a weighted mean score of 20.67 among the list of various marketing services. Majority of the farmer members (48.00% excellent and 26.67% good) perceived that the FPOs involved in collectivization of produce for better farm gate price was ranked second with weighted mean score of 20.60 and provision of transport facility as third ranked marketing service (weighted mean score 18.53) followed by other marketing services in order of importance. It implies that, FPOs establish direct linkages between farmers and markets, including wholesalers, retailers, processors, and export markets. By connecting farmers with buyers, FPOs help reduce intermediaries, ensuring that farmers receive a higher share of the final selling price. Farmers receive real-time information on market conditions, enabling them to make informed decisions about what crops to grow and when to sell. These

Table 9: Ranking of the marketing services as perceived by the farmer members of the FPOs

Sl. No.	III. Marketing services	Respondents Distribution (n =75)					Weighted mean	Rank
		5 (E)	4 (G)	3 (A)	2 (P)	1 (VP)		
1.	Collectivization of produce	36 (48.00)	20 (26.67)	11 (14.67)	8 (10.67)	0 (0)	20.60	2
2.	Collective sale	33 (44.00)	23 (30.67)	15 (20.00)	4 (5.33)	0 (0)	20.67	1
3.	Market access	22 (29.33)	15 (20.00)	17 (22.67)	13 (17.33)	8 (10.67)	17.00	6
4.	Market information	15 (20.00)	16 (21.33)	20 (26.67)	12 (16.00)	12 (16.00)	15.67	10
5.	Better bargain power	27 (36.00)	18 (24.00)	16 (21.33)	9 (12.00)	5 (6.67)	18.53	4
6.	Better price for produce	19 (25.33)	16 (21.33)	15 (20.00)	14 (18.67)	11 (14.67)	16.20	9
7.	Assured buy back	22 (29.33)	15 (20.00)	14 (18.67)	13 (17.33)	11 (14.67)	16.60	7
8.	Immediate payment after sale of produce	17 (22.67)	16 (21.33)	23 (30.67)	11 (14.67)	8 (10.67)	16.53	8
9.	Direct marketing of produce	25 (33.33)	13 (17.33)	17 (22.67)	15 (20.00)	5 (6.67)	17.53	5
10.	Transport facility	29 (38.67)	19 (25.33)	18 (24.00)	6 (8.00)	3 (4.00)	19.33	3

Frequency and percentage in parenthesis; E: Excellent; G: Good; A: Average; P: Poor; VP: Very poor

services are designed to help farmers access markets, obtain better prices for their produce, and improve overall market efficiency. The collective action approach enhanced the bargaining power of individual farmers and it was possible due to the membership of FPCs (Murray, 2019). Maximum involvement of the farmer members in the product value chain can ensure better marketing and helps fetch a better price for the produce (Kaaria, 2016).

The data presented in the table 10 shows the distribution of farmer members based on their level of perception towards various marketing services received by the FPOs. The data indicates that the majority (54.67%) of the members had perceived medium level of marketing services from the FPOs, while 28% of members had perceived low level of marketing services and 17.33% of members perceived high level of marketing services from the FPOs. The probable reasons for this kind of distribution might be because FPOs often face challenges in accessing broader and more lucrative markets due to their smaller size and limited resources, establishing strong and reliable linkages with market players, such as wholesalers, retailers, and processors is a challenging task for FPOs. Many FPOs, particularly those in rural and remote areas, may lack the necessary infrastructure for storage, processing, and transportation of agricultural produce. Expanding into new and niche markets requires additional efforts and resources for FPOs. They may also struggle to gather and disseminate market information to their members, impacting their marketing services. Limited market access can restrict their ability to provide extensive marketing services. Linkages are vital for FPCs for ensuring better marketing and trade facilitation of the produce (Trebin, 2014; Swati, 2019; Jose and Meena, 2019). Hence, majority of the farmer members perceived that, medium level of marketing services. The results were in conformity with Sanjay and Chowdary (2018).

Table 10: Distribution of members on the basis of perception towards marketing services

Sl. No.	Category	Respondents (n=75)	
		Frequency	%
1.	Low (<29.05)	21	28.00
2.	Medium (29.05–30.62)	41	54.67
3.	High (>30.62)	13	17.33
Total		75	100.00

3.5. Processing and value addition services

The data presented in the table 11 shows the list of various processing and value addition services provided by the FPOs and ranking of those services as perceived by the farmer members of the FPOs. The results revealed that the majority of the farmer members (44.00% excellent and 30.67% good) perceived that the procurement of produce from members was the first ranked processing and value addition service with a weighted mean score of 20.67 among the list of various services. Majority of the farmer members (48.00% excellent and 26.67% good) perceived that the cleaning and grading of produce for further processing and value addition was ranked second with weighted mean score of 20.60 and provision of storage facility as third ranked service (weighted mean score 17.53) followed by other processing and value addition services in order of importance. It implies that, FPOs facilitate the adoption of modern processing technologies and techniques, which improves the efficiency, reduce post-harvest losses, and enhance the overall productivity of the agricultural value chain. Farmers usually start their processing and marketing activity collectively through FPCs and it helps to eliminate middlemen from the value chain (Trebin, 2016).

The data presented in the table 12 shows the distribution of farmer members based on their level of perception towards various processing and value addition services received by the FPOs. The data indicates that the majority (62.67%) of the members had perceived medium level of processing and value addition services from the FPOs, while 21.33% of members had perceived high level of processing and value addition services and 16% of members perceived low level of processing and value addition services from the FPOs. The probable reasons for this kind of distribution might be because FPOs, especially those in rural and remote areas, often lack access to processing facilities such as food processing units, cold storage and packaging units. FPOs may struggle with quality control measures, which can affect their ability to access premium markets which is crucial for processing and value addition. Many FPOs may not have specialized knowledge and technical expertise on value addition and processing. Also establishing and maintaining processing facilities and equipment requires a significant financial investment. The absence of processing infrastructure can limit their ability to engage in value addition activities. Achieving economies of scale is essential for cost-effective value addition, and smaller FPOs may find it more challenging to reach this level. Hence, majority of the farmer members perceived that, medium level of processing and value addition services. The results are in conformity with Shreya et al. (2023).

3.6. Overall performance of FPOs in providing various services as perceived by the farmer members

The data presented in the table 13 shows the overall performance of FPOs in providing various services as perceived by the farmer members. The data indicates that the majority (65.33%) of the members had received medium

Table 11: Ranking of the processing and value addition services as perceived by the farmer members of the FPOs

Sl. No.	III. Processing and value addition services	Respondents Distribution (n =75)					Weighted mean	Rank
		5 (E)	4 (G)	3 (A)	2 (P)	1 (VP)		
1.	Procurement of produce from members	33 (44.00)	23 (30.67)	15 (20.00)	4 (5.33)	0 (0)	20.67	1
2.	Cleaning of produce	36 (48.00)	20 (26.67)	20 (26.67)	8 (10.67)	0 (0)	20.60	2
3.	Drying of produce	18 (24.00)	13 (17.33)	15 (20.00)	17 (22.67)	12 (16.00)	15.53	8
4.	Product differentiation	14 (18.67)	15 (20.00)	13 (17.33)	23 (30.67)	10 (13.33)	15.00	9
5.	Standardization	15 (20.00)	16 (21.33)	12 (16.00)	17 (22.67)	15 (20.00)	14.93	10
6.	Grading	19 (25.33)	16 (21.33)	15 (20.00)	14 (18.67)	11 (14.67)	16.20	6
7.	Value addition	18 (24.00)	16 (21.33)	19 (25.33)	17 (22.67)	5 (6.67)	16.67	4
8.	Branding	17 (22.67)	16 (21.33)	23 (30.67)	11 (14.67)	8 (10.67)	16.53	5
9.	Packaging	18 (24.00)	13 (17.33)	16 (21.33)	17 (22.67)	11 (14.67)	15.67	7
10.	Storage facility	19 (25.33)	23 (30.67)	14 (18.67)	15 (20.00)	4 (5.33)	17.53	3
11.	Ware house facility	14 (18.67)	11 (14.67)	15 (20.00)	18 (24.00)	17 (22.67)	14.13	14.13

Frequency and percentage in parenthesis; E: Excellent; G: Good; A: Average; P: Poor; VP: Very poor

Table 12: Distribution of members on the basis of perception towards processing and value addition services

Sl. No.	Category	Respondents (n=75)	
		Frequency	%
1.	Low (<29.93)	12	16.00
2.	Medium (29.93 – 34.72)	47	62.67
3.	High (>34.72)	16	21.33
Total		75	100.00

Table 13: Distribution of farmer members on the basis of perception towards FPO services

Sl. No.	Category	Respondents (n=75)	
		Frequency	% age
1	Low (<29.93)	12	16.00
2	Medium (29.93 – 34.72)	49	65.33
3	High (>34.72)	14	18.67
Total		75	100.00

level of services from the FPOs, while 18.67% of members had received high level of services and 16% of members received low level of services from the FPOs. The probable reasons for this kind of distribution might be because the capacity and expertise of FPO leadership and members play a crucial role, FPOs with well-trained and knowledgeable leadership and members are better equipped to deliver high-quality services. However medium-level expertise can result in medium-level service provision. Hence, majority of the farmer members perceived that, medium level of services from their FPOs.

4. CONCLUSION

The overall performance of FPOs as perceived by the farmer members was revealed that majority of the members (65.33%) had perceived that FPOs performance in terms of all the services was medium while 18.67 % of members had received high level of services and 16 % of members had received low level of services from the FPOs.

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