

ARTICLES

An Economic Analysis of FPOs in the State of Andhra Pradesh: A Comparative Study Based on Business Strategy

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ABSTRACT

Farmer producer organizations (FPOs) are institutional models that allow farmers to organize themselves as collectives and perform activities to reap large scale economies. However, the impact is constrained by factors such as capacities, capital, business focus and other dynamics. The present study taken up in the state of Andhra Pradesh aims to understand the impact of business approach adopted by FPOs on economic benefits realized by FPO member farmers. The total sample size of FPOs, FPO member and non-member farmers accounted for 15, 150 and 150, respectively. Dummy variable regression results indicated that farmer members of production-centric FPOs did not differ significantly from non-FPO farmers in terms of key outcome variables: average net farm income (ANFI), average net savings in input cost (ANSIC), and average net savings in marketing cost (ANSMC) computed on a per-acre-per-annum basis. However, farmer members of market-centric FPOs showed significant advantages. They saved ₹ 62.15 for every ₹100 spent by non-FPO farmers on marketing and earned ₹ 14.54 more for every ₹ 100 earned by non-FPO farmers. These findings underscore the potential benefits of adopting a market-centric approach for both upcoming and existing production-centric FPOs. To maximize these benefits, FPOs are encouraged to align their strategies with the dynamics of the agri value chain, recognizing the importance of downstream activities in achieving sustainable success for their member farmers.

Keywords: Farmer Producer Organizations, Production-centric, Market-centric, Net farm income, Dummy Variable Regression

JEL classification: C21, Q12, Q13, Q18

I

INTRODUCTION

Small and fragmented land holdings pose significant challenges to small and marginal farmers in Indian agriculture. Collectivisation of farmers into collective entities such as cooperatives, joint liability groups (JLGs), farmer clubs, producer organizations (POs) act as a mechanism to tackle the challenges of small-scale farming through the advantage of collective bargaining, increased accessibility to input and output markets, credit, information, technology and many more (Trebbin and Hassler, 2012; Vadivelu and Kiran, 2013; Prathiban et al., 2015, Government of India, 2019). However, studies on agricultural cooperatives indicated a large number of these cooperatives failing to discharge the deliverables due to multiple factors such as funds mismanagement, corruption, elite capture, poor governance structure, little market orientation, etc. (Agarwal, 2010; Shah, 2016 and Ramappa and Yashashwini, 2018). In the light of poor performance of traditional agricultural cooperatives, Government of

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India introduced farmer producer organisations (FPOs) for enhancing the welfare of farmers by increasing their collective bargaining power and improving access to inputs, markets, information (Verma, 2020)

Producer organisations (POs) are legal entities registered either under state cooperative society acts/Mutually Aided Cooperative Societies (MACS) or the Indian Company Act, 1956 (NABARD, 2015). If the primary producers of POs are farmers, then it is a farmer producer organisation (FPO). Farmer producer companies (FPCs) are FPOs that get registered under the Companies Act. A total of 15984 FPOs are registered in India till date, of which around 70 per cent got registered as producer companies (PCs) (NAARM, 2022). The business activities of these FPOs in India have been largely engaged in farm input selling followed by produce aggregation (Singh, 2021). Despite policy and institutional initiations, only a few FPOs (less than 30 per cent) are prospering in their growth (Government of India, 2019). The body of literature on FPOs pointed out various challenges. Mahajan (2015) highlighted the FPOs lack capital and capacities. Singh (2022) emphasised the absence of business skills. Shree and Vaishnavi (2022) identified insufficient business expertise. NABARD (2022) noted the issue of inadequate professional management. Additionally, Govil *et al.* (2020) discussed the lack of ownership sense. All these factors not only hinder the growth of FPOs but also underscore an immediate urgent need to enhance their capacities.

Despite challenges, reports indicate that FPOs are positively impacting small farmers in enhancing farm level income (Singh and Vatta, 2019), technology adoption (Verma *et al.*, 2019), and transaction cost reduction (Prathiban *et al.*, 2015; Manaswi *et al.*, 2020).

The present study aims to analyse the economic impact created by FPOs at the farmer level with a specific emphasis on their business orientation. In other words, the research seeks to discern any variations in economic impact at farmer level resulting from the activities of FPOs. It is crucial to note that the classification of FPOs into production-centric or market-centric categories is undertaken after the collection and analysis of pertinent data. Subsequently, the study investigates the resultant economic impact at the farmer level arising from adopting these distinct business approaches. The formulated hypotheses are designed to serve as a structured framework for achieving the research objectives:

Hypothesis 1 (H₁): No significant difference exists between the economic impact of production centric FPO member-farmers and non-FPO-farmers.

Hypothesis 2 (H₂): No significant difference exists between the economic impact of market centric FPO member-farmers and non-FPO-farmers.

II

MATERIALS AND METHODS

The state of Andhra Pradesh is broadly categorised into Rayalaseema, Coastal Andhra, Delta and North Coastal regions. Rayalaseema and Coastal Andhra regions

were identified for the study due to their highest net sown area and agricultural gross domestic product contribution to the state. Chittoor and Kurnool districts (Rayalaseema), SPS Nellore and Guntur districts (coastal Andhra) were selected due to a greater number of functional FPOs than other districts of selected regions. The FPO particulars in these districts were obtained from major FPO promoting agencies of the state namely NABARD, State Horticulture Department. A list of FPOs in these districts was prepared based on the study criterion, i.e., FPOs functioning since 2019 and meeting all statutory compliances regularly. A total of 15 FPOs were chosen for the study with four FPOs chosen randomly from each of the selected districts except Guntur district, where three FPOs were randomly selected based on the proportion of total FPOs in the respective district. The chosen sample ensures representation from both legal structures, including FPCs with 11 instances and cooperatives with four instances. Additionally, it encompasses promoting organisations such as NABARD (10 instances) and the state horticulture department (5 instances), aligning with the proportion of FPOs within each respective category.

From each FPO, 10 farmers were randomly selected, resulting in a sample size of 150 FPO member-farmers. For a better assessment of the impact created based on the functional approach of FPOs, another 150 non-FPO--farmers in the surrounding operational area of production centric and market centric FPO members were identified. Care has been taken such that there existed similarities in cropping pattern, irrigation sources, climatic and market conditions of both FPO and non-FPO--farmers. The representative sample comprising FPOs, FPO farmers and non-FPO farmers were post stratified based on their business approach for further analysis and is discussed in the next section.

Primary data pertaining to economies of crops in terms of costs and returns were obtained from sample farmers for computation of outcome variables, namely average net farm income per acre per annum (ANFI), average net savings in input cost per acre per annum (ANSIC) and average net savings in marketing cost per acre per annum (ANSMC). The information obtained pertains to the agricultural year 2022-23. A dummy variable regression model was used to determine how the outcome variables (average input costs, average marketing costs, average farm income) differ between the FPO farmers and non- members. Stata 13.0 version was employed for analysing the data. The model is written as

$$Y_i = \beta_1 + \beta_2 D_i + u_i$$

Where,

- Y_i = 1. Average input costs (Rs/per acre per annum) of farmers
- 2. Average marketing costs (Rs/per acre per annum) of farmers
- 3. Average farm income (Rs/per acre per annum) of farmers

D_i = 1 if the farmer is a member of FPO

0 if the farmer is not a member of FPO

β₁ = Intercept

β₂ = Differential intercept coefficient

III

RESULTS AND DISCUSSION

Distribution of FPOs Based on Adopted Business Approach

The business activities of FPOs are clearly depicted in Table 1 and are the basis for categorising FPOs based on this approach. It was observed from the business operations of FPOs that, FPOs of one group were primarily focusing on enhancing the production of member farmers through establishing backward linkages in the value chain, ensuring timely availability and accessibility of inputs and realising cost savings from input purchases. As the business orientation of this group of FPOs is production centric in nature, these FPOs are represented as production centric approached FPOs. While the other group majorly focused on establishing forward linkages in the agri value chain with or without backward integration to derive benefits from collective bargaining in terms of fetching better prices and lowering transaction costs. These FPOs are referred to as market centric FPOs as the business orientation is market centric in nature. Further, an overview of profile characteristics of FPOs encompassing their details such as FPO name, legal entity, date of establishment, activities undertaken, membership base, promoting and supporting agencies are provided in Appendix 1 to enhance the comprehension of FPOs within the operational context.

TABLE 1 : BUSINESS ACTIVITIES OF SAMPLE FPOS

(1)	Sale of agri inputs (2)	Market facilitation /aggregation (3)	Primary processing (4)	Secondary processing (5)	Branding and Retailing (6)
AHMACS	✓	×	×	×	×
DPPFPC	×	✓	×	×	×
KMACS	✓	×	×	×	×
MBFPC	✓	✓	✓	×	×
MRFPC	✓	×	×	×	×
NVFPC	✓	×	×	×	×
PALFPC	×	✓	✓	×	×
PFFPC	✓	✓	×	×	×
PYKFPC	×	✓	✓	✓	✓
RSMACS	✓	×	×	×	×
SAFPC	✓	✓	✓	✓	✓
SAMACS	✓	✓	✓	×	×
SCMACS	✓	×	×	×	×
SNRFPC	✓	×	×	×	×
YKFPC	✓	✓	✓	×	×

×: indicates no activity ; ✓ indicates activity taken to a limited or full extent.

Table 2 infers that the business orientation of 47 per cent of FPOs is production centric while that of 53 per cent is market centric in nature. Out of 150 FPO member farmers, 47 per cent and 53 per cent availed membership in FPOs whose business approach is production centric and market centric, respectively. Of the total 150 non-FPO farmers, 47 per cent and 53 per cent were surrounding farmers of production centric and market centric FPO farmers, respectively.

TABLE 2: DISTRIBUTION OF FPOS BASED ON BUSINESS APPROACH

Business approach (1)	Sample number of FPOs (2)	FPO Codes (3)	Sample FPO member farmers (4)	Sample non FPO farmers (5)
Production centric	7 (47 per cent)	AHMACS, KMACS, MRFPC, NVFPC, SNRFPC, SCMACS DPPFPC, MBFPC,	70 (47 per cent)	70 (47 per cent)
Market centric	8 (53 per cent)	PFFPC, PALFPC, PYKFPC, SAMACS, YKFPC	80 (53 per cent)	80 (53 per cent)
Total	15 (100 per cent)		150 (100 per cent)	150 (100 per cent)

Impact of FPO Membership Based on Business Approach Adopted by FPOs

Several studies conducted an impact assessment of farmer membership in collective action groups by examining the variations in net farm income between members and non-members. However, the present study adopts a more comprehensive approach. In addition to the outcome variable, average net farm income per acre per annum (ANFI), other two outcome variables, namely average net savings in input cost per acre per annum (ANSIC) and average net savings in marketing cost per acre per annum (ANSMC) were also considered to compare the impact of FPOs on their member farmers in relation to their counterpart-controlled group. As factors such as timely input availability, better market access contribute to reducing input costs, and marketing costs while also fetching better prices, ANSIC and ANSMC also serve as crucial outcome indicators. These indicators assess the impact of business operations (production/ market centric) carried out by FPOs through the assessment of net savings realized by the member farmers in input costs and marketing costs compared to non-members. The economics of costs and returns of various crops grown by farmer members of production and market centric FPOs were calculated separately and then compared with their counterparts using a dummy variable regression model to account for the actual economic impact of FPO membership. The results are presented in Table 3 and Table 4.

Table 3 infers that the average input costs, marketing costs, and net farm income of farmers per acre per annum in the study area were ₹42022.69, ₹9589.89 and ₹52933.58, respectively. The dummy variable regression results indicated that farmers of production centric FPOs realised an average net savings in input costs by ₹1556.57 (3.70 per cent) per acre per annum, average net savings of ₹1899.39 (19.80 per cent) per acre per annum in marketing costs and earned an additional income of ₹3176.46 (6.00 per cent) per acre per annum compared to non-members. In other words, production centric FPO farmers were saving an average of ₹3.70 and ₹19.80 for every Rs. 100 spent by non-members on agri inputs and marketing operations, respectively, over their counterparts while earning ₹ 6 higher for every 100 earned by non-FPO

TABLE 3: ECONOMIC IMPACT OF FARMER MEMBERSHIP IN PRODUCTION CENTRIC FPOS (DUMMY VARIABLE REGRESSION MODEL)

Outcome variables		Coef.	Std. Err.	t value	P>t	95% Conf. Interval	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Average net savings in input cost (Rs/per acre/per annum)	FPO member _{NS}	-1556.57 (3.70)	5080.58	-0.31	0.76	-11602.42	8489.28
Average input costs (Rs/per acre/per annum)	Constant	42022.69	3592.51	12.53	0.00	37919.21	52126.18
Average net savings in marketing cost (Rs/per acre/per annum)	FPO member _{NS}	-1899.39 (19.80)	1948.80	-0.38	0.70	-4598.76	3107.98
Average marketing cost (Rs/per acre/per annum)	Constant	9589.86	1378.01	8.78	0.00	9380.12	14829.60
Average net farm income (Rs/per acre/per annum)	FPO member _{NS}	3176.46 (6.00)	5289.72	.022	0.82	-11635.84	9282.91
	Constant	52933.58	3740.39	15.49	0.00	50537.69	65329.47

farmers. Thus, it can be interpreted that even though production centric FPOs were trying to establish backward linkages for arranging input supplies, the economic impact of these operations was substantially low (3.70 per cent cost savings). Hence, there was not much difference between the average input costs of member farmers and those of the control group, and hence, the results were insignificant. Although the production centric FPOs were not focusing on establishing forward linkages, due to their collective bargaining, and sharing of market information among the FPO members, they realised 19.80 per cent savings in marketing costs. As a result of these business operations, there was only 6.00 per cent increase in the average net income of production centric FPO members over their control group. Thus, we accept the H1 stating that there existed no significant mean differences with regard to outcome variables between farmer members of production centric FPOs and non-members.

The results of Table 4 indicate that the average input costs, marketing costs, and net farm income of farmers per acre per annum in the study area were ₹40915.47, ₹7821.26 and ₹53754.57, respectively. The dummy variable regression results indicated that farmers of market centric FPOs realised average net savings in input costs by ₹1708.58 (4.17 per cent) per acre per annum, average net savings of ₹4861.30 (62.15 per cent) per acre per annum in marketing costs and earned an additional income of ₹7817.45 (14.54 per cent) per acre per annum compared to non-members. In other words, production-centric FPO farmers were saving an average of ₹ 4.17 and ₹62.15 for every ₹100 spent by non-members on agri inputs and marketing respectively, over their counterparts while earning ₹ 14.54 higher for every 100 earned by non-FPO farmers at five per cent significance level.

TABLE 4: ECONOMIC IMPACT OF MEMBERSHIP IN MARKET CENTRIC APPROACHED FPOS (DUMMY VARIABLE REGRESSION MODEL)

Outcome variables		Coef.	Std. Err.	t value	P>t	95 per cent Conf. Interval	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Average net savings in input cost (Rs/per acre/per annum)	FPO member ^{NS}	-1708.58 (4.17)	2311.21	-0.74	0.46	-6273.44	2856.28
Average input costs (Rs/per acre/per annum)	Constant	40915.47	1634.28	25.04	0.00	37687.62	44143.31
Average net savings in marketing cost (Rs/per acre/per annum)	FPO member ^{***}	-4861.30 (62.15)	896.25	-3.75	0.00	-5131.47	-1591.13
Average marketing cost (Rs/per acre/per annum)	Constant	7821.26	633.74	10.76	0.00	5569.56	8072.96
Average net farm income (Rs/per acre/per annum)	FPO member ^{**}	7817.45 (14.54)	5456.50	1.98	0.04	-4159.65	17394.55
	Constant	53754.57	3858.33	13.93	0.00	46134.01	61375.12

Note:*** and ** indicates significance at 1 and 5 per cent level; NS – Not significant

Figures in the parentheses indicate percentage to constant

The results can be further interpreted that as market centric FPOs were majorly focusing on forward operations, the economic impact of backward operations, i.e., arranging input supplies to member farmers, was substantially low compared to the control group (4.17 per cent cost savings). Hence, no significant differences in the average input costs existed between the two groups. But the members of market centric FPOs realised substantially higher average net savings of Rs. 62.15 for every Rs. 100 spent by their counterparts on marketing. This was due to the aggregated effect of these FPOs in establishing forward linkages and offering varied services such as disseminating price information among members, direct farm procurement, arranging for primary processing activities, and logistics. With regard to net farm income, the members of market centric FPOs realised Rs.14.54 higher for every Rs.100 earned by their counterparts. This was due to FPOs, as aggregators, were efficiently pooling and grading the marketable surplus from small holdings directly through farm gate procurement, followed by dynamically linking themselves to alternative market channels, which resulted in not only reduced marketing costs but also fetched better prices. Nevertheless, there was a clear comparative differentiation observed in the magnitude of roles played among the FPOs, though the services were along similar lines. Thus, we reject H2, stating that significant mean differences existed between member farmers of market centric FPOs and non-FPO farmers with regard to average marketing costs and average net farm income per acre per annum. The results are consistent with the findings of Fischer and Qaim, 2012; Tolno *et al.*, 2015; Prathiban *et al.*, 2015; Latynskiy and Berger, 2016 and Singh and Vatta, 2019 who reported in their studies that seeking membership in farmer based collective organisations such as cooperatives, producer organisations led to higher farm incomes, reduced transaction costs.

IV

RECOMMENDATIONS

Most FPOs initially adopt a production centric approach to attract members, boost membership, gain confidence and trust. However, it was observed that most FPOs sell inputs to farmers at slightly lower prices than the market. Consequently, although production-centric FPOs were able to save Rs. 3.70 for every Rs. 100 spent on agricultural inputs by non-FPO farmers, the results were not statistically significant. This lack of significance may be attributed to the lower price differences by FPOs compared to market players, variation in input quantity used among farmers, mixed purchase behavior from both FPOs and input stores, and the fact that FPOs can meet around 60 to 80 per cent of farmers' input requirements due to capital constraints. Despite these limitations, FPOs, through collective bargaining, still managed to save Rs. 19.80 for every Rs. 100 spent by non-FPO farmers on marketing and earned Rs. 6 in farm income for every Rs. 100 earned by non-FPO members. To achieve a significant economic impact on input savings, FPOs should be able to provide inputs on a credit basis and meet all the input needs of farmers. Access to adequate capital plays a crucial role in this regard. Therefore, innovative FPO-centric agricultural value chain financing models need to be developed that are tailored and adaptable to FPO operations.

Further, it becomes imperative for FPOs to transition towards a market-centric approach to generate substantial impacts at the farm level. This shift requires a strategic focus on enhancing the internal and external capacities of existing FPOs while also imparting capital in accordance with their life cycle stages. This is because, to adopt a market-focused approach, FPOs require diverse capacities for fostering teamwork, building trust, improving decision-making processes, managing group conflicts, facilitating technological innovations, accessing markets, understanding market needs and preferences, and managing risk. Additionally, they need to comprehend the regulatory and legal frameworks (licenses and certifications) governing their operations. Over time, these FPOs need to acquire collaborative and negotiation capacities by forging partnerships and pooling investments to enhance their bargaining power. This requires investing in training and capacity-building activities regularly. Furthermore, capital is crucial for conducting various business activities of FPOs, and the requirement increases as FPOs progress through their life stages. FPOs with a market orientation need significant capital to make prompt payments to farmers, enhance member engagement, invest in market infrastructure for better revenue generation, and ensure organizational viability and sustainability. This highlights the necessity for innovative agri value chain financing models to address the capital shortages. However, it's important to understand that capacities and capital are intertwined, enabling FPOs to leverage resources effectively for stakeholder benefit. Studies reported by Mahajan (2015) and Amani, (2016) also stressed the need to improve the capital and capacities of FPOs to perform business operations in the

dynamic agribusiness environment efficiently. Further, the study has also created a way forward in deciding the business approach to be adopted by the current and future FPOs to attain viability and develop a suitable impact on the farming community while concurrently enhancing their competencies. This entails adopting a market-centric business approach by both upcoming and existing FPOs, focusing on developing adequate capacities for long-term organisational sustainability. Further, it is also crucial for FPO promoting organisations to develop a feasible business plan tailored to the unique needs of FPOs. Importantly, there is a pressing need to incorporate a marketing focus into the formulation of the business plan, thus emphasising the strategic importance of marketing in the development of an action plan for FPOs.

V

LIMITATION OF THE STUDY

The study specifically delimits its focus to the business approaches (production-centric or market-centric approach) employed by FPOs in the agricultural value chain. The primary analysis centers on discerning the variances in economic impact on farmer members from adopting these specific approaches. However, it is acknowledged that additional factors could influence Farmer Producer Organizations (FPOs), including the capacities of top management, support from promoting agencies, hassle-free capital assistance, internal dynamics, among others. Notably, the study confines its examination of economic impact solely to the chosen business approach within the agricultural value chain adopted by FPOs, and does not extend its analysis to these other potential influencing factors.

VI

CONCLUSION

The study aims to assess and compare the economic benefits derived by member farmers of Farmer Producer Organizations (FPOs) in Andhra Pradesh based on the adopted business approaches. The total sample size of FPOs, FPO member, and non-member farmers were 15, 150 and 150, respectively. Of the total 15 FPOs, seven adopted a production-centric approach, while eight adopted a market centric approach. Dummy variable regression results for the outcome variables computed on per acre per annum basis, average net farm income, average net savings in input cost, and average net savings in marketing costs indicated that production centric FPO farmers and non FPO farmers showed no significant differences for the above outcome variables. Meanwhile, market centric FPOs significantly realized a higher average net savings of Rs. 62.15 for every Rs.100 spent by non FPO farmers on marketing and net farm income of Rs.14.54 higher for every Rs.100 earned by non FPO farmers. These findings highlight the significance of a market-centric approach for emerging and established production-centric FPOs. Moreover, FPOs are encouraged to strategically enhance capacities, increase capital, and refine business orientation, particularly

emphasising downstream activities in the agricultural value chain. This strategic focus is crucial for generating substantial economic benefits for farmer members.

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ANNEXURE 1 : SAMPLE FPO CHARACTERISTICS

Sl. No.	Name of the FPO	FPO code	Location (District)	Legal structure	Year of Establishment	Total Membership as on 31.03.2022	Promoting & Facilitating Agency (POPI/RI/CBBO) (8)	Supporting Agency (9)	Nature of business activity
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	Amruthapani Horticulture Farmer Producer Organization	AHMACS	Nellore	Cooperative Society	26.12.2019	600	KPL MACTS	NABARD	Sale of agri inputs
2	Duttaluru Prgagathi Pulses Producer Company Ltd	DPPFPC	Nellore	Producer Company	01.09.2016	258	CCD	NABARD	Marketing of pulses
3	Kalikiri APMACS Ltd	KMACS	Chittoor	Cooperative Society	22.08.2019	528	APMAS	Dept of Horticulture & APMAS	Sale of agri inputs
4	Mahanandi Banana Farmers Producer Company Ltd	MBFPC	Kurnool	Producer Company	05.05.2017	500	Ramki Foundation	NABARD	Sale of agri inputs and marketing of banana
5	Maryada Ramanna Patnam Farmers Producer Company Ltd	MRFPC	Chittoor	Producer Company	05.01.2018	1360	APMAS	Dept of Horticulture & APMAS	Sale of agri inputs
6	Narakoduru Vegetable Farmers Producer Company Ltd	NVFPC	Guntur	Producer Company	30.12.2019	500	NILAGIRI Foundation	NABARD	Sale of agri inputs
7	Palamaner Farmer Producer Company Ltd	PALFPC	Chittoor	Producer Company	26.12.2016	680	Palamaneru MVRS	NABARD	Marketing of vegetables
8	Parimala Flower Producer Company Ltd	PFFPC	Guntur	Producer Company	03.05.2016	760	SEARCH	NABARD	Sale of Agri inputs and marketing of flowers
9	Pragathi Yuva Kendram Farmers Producers Company Ltd	PYKFPC	Nellore	Producer Company	25.07.2016	1559	KPL MACTS	NABARD	Marketing of flowers and food products
10	Rythu Swaraj Horticulture Farmer Producer Organization	RSMACS	Nellore	Cooperative Society	10.02.2020	579	KPL MACTS	NABARD	Sale of agri inputs
11	Sehamitha Agri Producers Company Ltd	SAFPC	Guntur	Producer Company	10.11.2015	2153	NILAGIRI Foundation	NABARD	Sales of manures & Marketing of turmeric, chilli
12	Sri Annamaya Raithu Mutually Aided Cooperative Society Ltd	SAMACS	Chittoor	Cooperative Society	01.08.2017	650	SELF	Dept of Horticulture & APMAS	Sale of Agri inputs and marketing of mango
13	SriLakshmi Chenna Kesava Swamy Women Farmer Producers MACS Ltd	SCMACS	Kurnool	Cooperative Society	04.10.2019	320	APMAS	Dept of Horticulture & APMAS	Sale of Agri inputs
14	Sri Nalla Reddy Swamy FPC Ltd	SNRFPC	Kurnool	Producer Company	24.05.2019	544	APMAS	Dept of Horticulture & APMAS	Sale of Agri inputs
15	Y Khanapuram Farmers Producer Company Ltd	YKFPC	Kurnool	Producer Company	02.05.2016	607	APARD	NABARD	Sale of agri inputs and marketing of vegetables