MARKETING AND BUSINESS ANALYSIS OF HORTICULTURE BASED FARMER PRODUCER ORGANISATIONS IN TELANGANA STATE

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MARKETING AND BUSINESS ANALYSIS OF HORTICULTURE BASED FARMER PRODUCER ORGANISATIONS IN TELANGANA STATE

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CERTIFICATE

This is to certify that the thesis entitled **"MARKETING AND BUSINESS ANALYSIS OF HORTICULTURE BASED FARMER PRODUCER ORGANISATIONS IN TELANGANA STATE"** submitted in partial fulfilment of the requirements for the degree of **MASTER OF SCIENCE (Agriculture)** in **AGRICULTURAL MARKETING AND CO-OPERATION** to the University of Agricultural Sciences Bangalore is a record of *bona fide* research work carried out by **Mr. GADDE SAI SIVA RAMA KRISHNA, PALB 9174** during the period of his study in this University, under my guidance and supervision. The Thesis has not previously formed the basis for the award of any degree, diploma, associateship, fellowship or other similar titles.

Bengaluru
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AFFECTIONATELY
DEDICATED TO MY
BELOVED PARENTS,
MY GUIDE AND
FARMERS

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It is my pleasure to glance back and recall the path one travelled during the day of hard work and perseverance. In every one's life, the day arises when one has to shape the feelings in words. Someimes, the words become unable to express the feelings of mind, because, the feelings of heart are beyond the reach of the words. When, I came to complete this manuscript, so many memories have rushed through my mind which is full of gratitude to those who encouraged and helped me at various stages of this research. It gives me immense pleasure to record my feelings at this place.

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Business performance of selected fruit and vegetable based FPOs in Telangana state

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Introduction

The basic idea is that Farmers Producer Organisations will strengthen the bargaining power of farmers with buyers, reducing the transaction costs and production risks faced by farmers. This will bring farmers closer to the market, allowing them to gain a comparative advantage and possibly even connect them to international markets. The objective of the establishment of the FPO is to internalize extension services for members and to provide upstream links like inputs, credits and technologies and downstream links like production facilities, marketing, etc.

Most of the FPOs are performing in input marketing only whereas some progressive farmer FPOs are working in Horticulture crops. Telangana state has considered agriculture as its primary goal to improve farmer community wellness to boost agricultural production and productivity. The agro-climatic conditions of Telangana are suitable for perennial fruit crops like mango, citrus, guava, banana, vegetables and flowers etc. There is a vast scope for enhancing the area under fruit crops from the existing 3.79 lakh ha. to 10.00 lakh ha. Enterprising and progressing farmers are willing to adopt new Technologies i.e., Green houses, mulching, drip automation etc. The state is also having a high export potential for Mango, bananas, Vegetables and Flowers. Telangana state has the potential to become an export hub.

Objectives

1. To study the business performance of selected fruit and vegetable based FPOs in Telangana state
2. Problems of horticultural based FPOs in Telangana state

Methodology

Fig.1: Map showing the study area

Study area:

This study was conducted in Telangana state.

Source of data:

Primary data is collected from 106 FPOs are performing output marketing in Horticulture. Further, these 106 FPOs are grouped into two categories based on the business turnover. Those two groups are named as good performing FPOs (GPFPOs) and Non-performing FPOs (NPFPOs). Later, from these two groups, 14 FPOs are selected constituting 7 from each group. These 7 FPOs are selected from each group by random sampling method.

Analytical tools and techniques:

The data were analysed through Marketing efficiency, financial ratios, garrett's ranking and descriptive statistics.

Results

Table 1: Marketing efficiencies of selected FPOs in Telangana

S.l No.	Marketing Efficiency	GPFPO Average	NGPFPO Average
1	Shepherd's	2.92	2.24
2	Acharya	1.92	1.23

Table 2: Liquidity Ratios of selected FPOs in Telangana (2020-21)

S.l No.	Liquidity Ratio	GPFPO Average of FPOs	NGPFPO Average of FPOs
1	Current Ratio	1.64	0.76
2	Acid test ratio	1.41	0.40

Table 3: Capital structure ratios of selected FPOs in Telangana (2020-21)

S.l No.	Capital Structure Ratio	GPFPO Average of FPOs	NGPFPO Average of FPOs
1	Debt Equity ratio	1.19	2.46
2	Debt Asset ratio	0.54	0.71
3	Net Capital ratio	1.88	1.42

Table 4: Problems faced by the selected FPOs in Telangana state

c	Name of the Problem	GPFPO Average weighted Score	GPFPO Rank (Based on scores)	NGPFPO Average weighted Score	NGPFPO Rank (Based on scores)
1	Lack of knowledge about exporting of fruits and vegetables	4.00	1	2.29	9
2	Lack of processing units for fruits and vegetables	3.86	2	2.57	5
3	Lack of storage for fruits and vegetables	3.43	3	1.86	10
4	Lack of adequate price in fruits and vegetables	3.29	4	3.29	3
5	Lack of modern infrastructure facility	2.86	5	2.43	8
6	Lack of collective efforts in marketing	2.43	6	3.86	1
7	Lack of access to market information and markets	2.43	6	2.57	5
8	Lack of assured quality in fruits and vegetables	2.14	8	2.86	4
9	Lack of proper transportation during peak season	1.86	9	2.57	5
10	Lack of awareness	1.71	10	3.71	2

Discussion

The average marketing efficiencies of the good performing group is 2.92 whereas 2.24 for non-performing FPOs in the shepherd's method. Less ME would reflect the inefficient marketing practices followed by the concerned FPOs and that suggests the need for improvement in marketing practices.

An average current ratio of 1.64 indicates that good performing FPOs are in the position to meet their current obligations. An average current ratio of 0.76 for non-performing FPOs warns that their current assets can't meet their current liabilities which are quite risky. Average acid test ratios of good performing ratios are 1.41 and 0.40 for non-performing. Ratios found to be greater than 1 indicating that good performing FPOs have enough cash to pay their immediate liabilities, such as short-term debts.

The average debt-equity ratio of good performing FPOs is 1.19 and 2.46 in non-performing. 1.19 ratio in good performance indicates less debt and reduced risk compared to other FPOs. The average debt asset ratio of good performing FPOs is 0.54 and 0.71 in non-performing. This ratio says that debts of the good performing can easily be paid off by selling its assets when compared to non-performing.

It has been found that the lack of knowledge about exporting fruits and vegetables and the lack of processing units for fruits and vegetables are the major problems faced by the good performing FPOs. Wherein in non-performing lack of collective efforts in marketing and lack of awareness about the concept

Summary

- The study was undertaken to examine the performance of some of the horticultural based FPOs
- Simple statistical tools like averages, ratios and percentages were used to calculate and compare the financial ratios, marketing activities and costs involved and also to contrast and interpret results appropriately.
- Most of the produce from GPFPOs was directly sold to the retailers and Raithu Bazar and they did not involve wholesalers in their channels. Some of the FPOs even sold directly to the final customers through google forms, social media, home deliveries etc. Direct selling of produce led to increase in the FPOs margin of profit and higher marketing efficiency.
- It has been found that the lack of knowledge about exporting fruits and vegetables and the lack of processing units for fruits and vegetables are the major problems faced by the GPFPOs

Advisory committee

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: Dr. Girish M.R
: Dr. Mamatha Girish

MARKETING AND BUSINESS ANALYSIS OF HORTICULTURE BASED FARMER PRODUCER ORGANISATIONS IN TELANGANA STATE

GADDE SAI SIVA RAMA KRISHNA

ABSTRACT

In India, there is a need to facilitate our farmers with access to improved technology, credit, better input and more markets to incentivize them to produce the better quality commodity. For this, the aggregation of small, marginal and landless farmers into FPOs will help enhance the economic strength and market linkages of farmers for enhancing their income. Hence, an attempt is made in the present study. Primary data was collected from NABARD and some data taken from FPOs employees. Desired social parameters like younger age (66.33% in Good performing FPOs), better education (68.75% in GPFPO) and gender participation influenced the performance of the FPOs positively and hence, it was suggested that these parameter needs to be given priorities. The concerned authorities should also encourage FPOs to involve them during formulation stage of FPO. Direct marketing of the produce by avoiding wholesalers and retailers was one of the indicators of success in GPFPOs (Marketing Efficiency -1.92) and hence, some kind of online platforms has to be made available for FPOs to sell their produce directly to customers. Diversifying the crop portfolio with more number of crops and providing equitable importance for the crops as seen in the GPFPO seven different crops would minimize the risk of marketing and hence, this strategy was suggested for FPOs. The success of the FPO also equally depends on meeting the requirements of the inputs of the members and this was clearly illustrated in the study. Youth and women participation would enhance the performance of FPOs.

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ತೆಲಂಗಾಣ ರಾಜ್ಯದಲ್ಲಿ ತೋಟಗಾರಿಕೆ ಆಧಾರಿತ ರೈತ ಉತ್ಪಾದಕ ಸಂಸ್ಥೆಗಳ ಮಾರಾಟ ಮತ್ತು ವ್ಯಾಪಾರದ ವಿಶ್ಲೇಷಣೆ

ಗದ್ದೆ ಸಾಯಿ ಶಿವರಾಮ ಕೃಷ್ಣ

ಸಾರಾಂಶ

ಭಾರತದಲ್ಲಿ, ನಮ್ಮ ರೈತರಿಗೆ ಸುಧಾರಿತ ತಂತ್ರಜ್ಞಾನ, ಸಾಲ, ಉತ್ತಮ ಇನ್‌ಪುಟ್ ಮತ್ತು ಉತ್ತಮ ಗುಣಮಟ್ಟದ ಸರಕುಗಳನ್ನು ಉತ್ಪಾದಿಸಲು ಪ್ರೋತ್ಸಾಹಿಸಲು ಹೆಚ್ಚಿನ ಮಾರುಕಟ್ಟೆಗಳಿಗೆ ಪ್ರವೇಶವನ್ನು ಒದಗಿಸುವ ಅವಶ್ಯಕತೆಯಿದೆ. ಇದಕ್ಕಾಗಿ, ಸಣ್ಣ, ಕನಿಷ್ಠ ಮತ್ತು ಭೂರಹಿತ ರೈತರನ್ನು FPO ಗಳಾಗಿ ಒಟ್ಟುಗೂಡಿಸುವುದರಿಂದ ಅವರ ಆದಾಯವನ್ನು ಹೆಚ್ಚಿಸಲು ರೈತರ ಆರ್ಥಿಕ ಬಲ ಮತ್ತು ಮಾರುಕಟ್ಟೆ ಸಂಪರ್ಕವನ್ನು ಹೆಚ್ಚಿಸಲು ಸಹಾಯ ಮಾಡುತ್ತದೆ. ಆದ್ದರಿಂದ, ಪ್ರಸ್ತುತ ಅಧ್ಯಯನದಲ್ಲಿ ಒಂದು ಪ್ರಯತ್ನವನ್ನು ಮಾಡಲಾಗಿದೆ. ನಬಾರ್ಡ್‌ನಿಂದ ಪ್ರಾಥಮಿಕ ದತ್ತಾಂಶ ವನ್ನು ಸಂಗ್ರಹಿಸಲಾಗಿದೆ ಮತ್ತು FPOಗಳ ಉದ್ಯೋಗಿಗಳಿಂದ ಕೆಲವು ಡೇಟಾವನ್ನು ತೆಗೆದುಕೊಳ್ಳಲಾಗಿದೆ. ಕಿರಿಯ ವಯಸ್ಸು (GPFPO ನಲ್ಲಿ 66.33%), ಉತ್ತಮ ಶಿಕ್ಷಣ (GPFPO ನಲ್ಲಿ 68.75%) ಮತ್ತು ಲಿಂಗ ಭಾಗವಹಿಸುವಿಕೆಯಂತಹ ಅಪೇಕ್ಷಿತ ಸಾಮಾಜಿಕ ನಿಯತಾಂಕಗಳು FPO ಗಳ ಕಾರ್ಯಕ್ಷಮತೆಯನ್ನು ಧನಾತ್ಮಕವಾಗಿ ಪ್ರಭಾವಿಸುತ್ತವೆ ಮತ್ತು ಆದ್ದರಿಂದ, ಈ ನಿಯತಾಂಕಗಳಿಗೆ ಆದ್ಯತೆಗಳನ್ನು ನೀಡಬೇಕೆಂದು ಸೂಚಿಸಲಾಗಿದೆ. ಸಂಬಂಧಪಟ್ಟ ಅಧಿಕಾರಿಗಳು FPO ರೂಪಿಸುವ ಹಂತದಲ್ಲಿ FPO ಗಳನ್ನು ಒಳಗೊಳ್ಳುವಂತೆ ಪ್ರೋತ್ಸಾಹಿಸಬೇಕು. ಸಗಟು ವ್ಯಾಪಾರಿಗಳು ಮತ್ತು ಚಿಲ್ಲರೆ ವ್ಯಾಪಾರಿಗಳನ್ನು ತಪ್ಪಿಸುವ ಮೂಲಕ ಉತ್ಪನ್ನದ ನೇರ ಮಾರುಕಟ್ಟೆಯು GPFPO ಗಳಲ್ಲಿ (ಮಾರಾಟ ದಕ್ಷತೆ-1.92) ಯಶಸ್ಸಿನ ಸೂಚಕಗಳಲ್ಲಿ ಒಂದಾಗಿದೆ ಮತ್ತು ಆದ್ದರಿಂದ, FPO ಗಳು ತಮ್ಮ ಉತ್ಪನ್ನಗಳನ್ನು ನೇರವಾಗಿ ಗ್ರಾಹಕರಿಗೆ ಮಾರಾಟ ಮಾಡಲು ಕೆಲವು ರೀತಿಯ ಆನ್‌ಲೈನ್ ಪ್ಲಾಟ್‌ಫಾರ್ಮ್‌ಗಳನ್ನು ಲಭ್ಯವಾಗುವಂತೆ ಮಾಡಬೇಕು. ಹೆಚ್ಚಿನ ಸಂಖ್ಯೆಯ ಬೆಳೆಗಳೊಂದಿಗೆ ಬೆಳೆ ಬಂಡವಾಳವನ್ನು ವೈವಿಧ್ಯಗೊಳಿಸುವುದು ಮತ್ತು GPFPO ಏಳು ವಿಭಿನ್ನ ಬೆಳೆಗಳಲ್ಲಿ ಕಂಡುಬರುವಂತೆ ಬೆಳೆಗಳಿಗೆ ಸಮಾನವಾದ ಪ್ರಾಮುಖ್ಯತೆಯನ್ನು ಒದಗಿಸುವುದು ಮಾರುಕಟ್ಟೆಯ ಅಪಾಯವನ್ನು ಕಡಿಮೆ ಮಾಡುತ್ತದೆ ಮತ್ತು ಆದ್ದರಿಂದ, FPO ಗಳಿಗೆ ಈ ತಂತ್ರವನ್ನು ಸೂಚಿಸಲಾಗಿದೆ. FPO ಯ ಯಶಸ್ಸು ಕೂಡ ಸದಸ್ಯರ ಒಳಹರಿವಿನ ಅವಶ್ಯಕತೆಗಳನ್ನು ಪೂರೈಸುವುದರ ಮೇಲೆ ಅವಲಂಬಿತವಾಗಿದೆ ಮತ್ತು ಇದನ್ನು ಅಧ್ಯಯನದಲ್ಲಿ ಸ್ಪಷ್ಟವಾಗಿ ವಿವರಿಸಲಾಗಿದೆ.

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ಪ್ರಧಾನ ಸಲಹೆಗಾರ

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INTRODUCTION

CHAPTER I
INTRODUCTION

Agriculture is referred to as the backbone of the country, contributing 13.7 per cent to the gross domestic product (GDP) and providing a livelihood for 58 per cent of the country's population. After the green revolution, food grain production has quadrupled in the past five decades from 51.0 million MT in 1950-51 to a record 316.06 million MT for the 2021-22 and thereby reaching a commendable state of self-sufficiency. Horticulture production made a highest of 331.05 million MT in 2020-21, as compared to 320.47 million tons in 2019-20. Production of fruits was estimated to be 103 million tons in 2020-21 while vegetable production at 196 million MT while the aromatic and medicinal crops registered a growth of 6.2 per cent with an estimated production of 0.78 million tons during the year.

With the rapidly changing Indian environment, the agricultural sector even with phenomenal increase in production is facing severe challenges, such as a decrease in the per capita agricultural land (due to the increasing dispersion of landholdings), a decline in the natural resource base, and an increase in the demand for non-agricultural land from urbanization and industrialization. Young people lack interest in agriculture where more than 40 per cent of rural youth wanted to leave agriculture, lacking a vibrant model of organizing farmers and connecting them to the market (National Bureau of Statistics, 2011). According to the 2015-16 Agricultural Census, 86.21 per cent of Indian farmers belonged to small and marginal class. The available per capita agricultural land in India was about 0.13 hectares in 2020.

The problems faced by small farmers in India are multifaceted. They produce fruits and vegetables in rural areas, but they are in great demand and prices are high in urban areas. To get more income, farmers need to sell their products in cities. But unfortunately, rural India lacks transportation and storage facilities that could help farmers in storing perishable goods for longer periods. Due to a lack of storage and processing facilities, more than 30 per cent of fruits and vegetables and 15 per cent of grains are getting wasted. The post-harvest food loss in India accounts for 10 per cent of the total output contributing 20

million MT which is equivalent to Australia's total annual food output (Technical Advisory Committee on Secondary Agriculture Report, 2013).

Processing and value-addition can ensure higher prices for farmers' products but farmers lack the infrastructure and capital required for processing. Farmers don't have access to the latest information and technologies as well as recent market trends and prices. This places farmers in a situation of ignorance and low bargaining power, which makes them vulnerable to exploitation by middlemen. The result of all this is that farmers cannot market their harvest and eventually sell their products at a lesser price. This reveals the obvious fact that Indian farmers are not that good traders and their products cannot get a profitable price. In India, the producer share in the consumer rupee is currently 10 to 23 per cent for fruits and vegetables, which is higher than 64 to 81 per cent in developed countries (FAO, 2013).

Another new challenge that the farmers are facing is the trend of globalization and liberalization. Small producers are fighting against large commercial producers, further complicating the situation. Therefore, small producers scattered in remote areas face many challenges that cannot be solved alone and also, the traditional agriculture alone cannot satisfy the interests of farmers. In this context, for agriculture to survive, it must find ways to increase profits (increasing income per unit of time and land) and create more employment opportunities. In this highly competitive modern era, agriculture can only be successful if it is transformed from a culture (a way of life) to a dynamic agribusiness entity.

A growing number of studies have shown that if small farmers participate in the market, they can substantially increase income from agriculture and allied activities. Therefore, the focus of development has shifted from increased production to market connectivity. One of the possible alternatives to effective marketing is to mobilize farmers to take collective action and arrange inputs and collective marketing to benefit from economies of scale. With this perception, it is necessary to mobilize farmers for joining Farmers Producer Organisations (FPOs) for collective activities. Farmers Producer Organisations are the groups of rural producers who come together to form organisations

that pursue the specific common interests of their members, carry out economic and technical activities that benefit their members, and maintain relationships with partners that operate in their economic and institutional environment.

Farmer Producer Organisations are important institutions for the poverty alleviation, empowerment and advancement of farmers and the rural poor (FAO, 2006). The National commission for farmers (NCF) pointed out in 2006 that peasant organisations should be promoted to combine the advantages of decentralized production and centralized services, post-harvest management, added value and marketing. The International Fund for Agricultural Development (IFAD) in 2004 stated: In rural areas, Farmer Producer Organisations are the most recent, and also the only institution that provides basic goods and services to the poor in rural areas to help them escape the cycle of poverty. FPO reduces the risks of individual farmers faced during seasonal crises. FPOs also help mobilize capital and contribute to the growth of the local economy. "A Producer Organisation (PO) is a generic name that represents different forms of community organisations such as large cooperatives, Primary Agricultural Cooperative Societies (PACS), Self-Help Groups (SHGs), Federation of SHGs, Commodity Interest Groups (CIGs), Joint Liability Groups (JLGs), Farmers Club (FCs), and Producer Companies (PCs).

Farmer Producer Organisations can use one of several possible forms, such as Farmers' Interest Groups (FIGs), CIGs, cooperatives, self-help groups, farmers' associations, producer organisations, and trade unions. Regardless of the form of organisation, Farmers Producer Organisations have certain characteristics: common interests, mandatory membership, rules, regulations and discipline, respect for quality standards in production and sharing responsibility roles on a rotation basis.

The basic idea is that Farmers Producer Organisations will strengthen the bargaining power of farmers with buyers, reducing the transaction costs and production risks faced by farmers. This will bring farmers closer to the market, allowing them to gain a comparative advantage and possibly even connect them to international markets. The objective of the establishment of the FPO is to internalize extension services for members

and to provide upstream links like inputs, credits and technologies and downstream links like production facilities, marketing, etc.

Farmer Producer Organisations can be grouped into two categories: one is community and resource-based and the rest are markets and commodity-oriented organisations (Chamala and Mortis, 1990). Community and resource-based FPOs may be present at the village level, including a wider range of clients for crops and products. They focus on the inputs and members needed to improve the productivity of land, water or animal-based business. These organisations are generally small, geographically well-defined, and primarily interested in inputs. These organisations can generate income from the sale of inputs and outputs. Revenue can be reused for expansion, data generation, business planning, and administrative expenses. Examples of such organisations are agricultural cooperative societies, self-help groups, FIGs, etc.

Commodity and market-oriented FPOs focus on a single product and select value-added products that have expanded the market. They are called the dominant producer groups. These FPOs are not specific to a single community, they can get members from the producers in that product's area interested in investing social capital to acquire the latest processing technology and professional labour. These FPOs are generally not small size and operate in a competitive environment. Research, input supply, agricultural extension, credit, product collection, processing and marketing are all integrated to maximize the return on investment realized by members who have invested in the conglomerate. Some of these organisations are the association of jackfruit producers, the association of grape producers, the association of onion producers, etc.

At present, efforts are being made to organize farmers in India. The Agricultural Technology Management Agency (ATMA) also organizes farmers into groups (FIG and CIG), Innovation in the Diffusion of Technology (ITD) and the National Agricultural Technology Project (NATP). Non-governmental organisations (NGOs) and Panchayat Raj organisations (PRI), the National Bank for Agriculture and Rural Development (NABARD) organizes farmers into SHGs and farmer clubs, the agriculture departments established production groups. State Agricultural Universities (SAU) also facilitate the

formation of farmer groups with the support of Krishi Vigyan Kendra's (KVK). The role of agricultural extension in promoting FPO includes the roles of empowerment, community organisation, human resource development and problem-solving and education (Chamala and Mortis, 1990).

The Small Farmer Agri Business Consortium (SFAC), through its FPO, intends to work closely with the Department of Agriculture and Cooperatives and various state governments to improve the production, productivity and profitability of farmers. Farmers will be organized into small informal groups that will be supported in the program to form associations appropriate to their context, including their coalition in the FPO to reach better with input and product markets and bargaining power.

To promote the development of direct agricultural produce, vegetables and fruits in the country, 'the Government of India enacted the scheme for the Development of Agricultural Marketing Infrastructure, Grading and Standardization of each commodity/item, based on the likeliness and acceptance by the consumers', as per their requirement and satisfaction'. To take this guidance forward, the Government of Telangana through its Department of Agriculture Marketing has initiated alternate marketing systems. With the farmer producer organisations spread in 12 districts Siddipet, Vikarabad, Nagarkurnool, Rangareddy, Suryapet, Kumram Bheem-Asifabad, Adilabad, Medak, Mahabubnagar, Narayanpet, Jagitial and Mancherial, FPOs in the Telangana state are offering the quality and graded produce to wide ranges of customers. The present study is proposed to examine the performance of some of these FPOs with the following specific objectives.

Specific Objectives:

1. To examine the practices and efficiencies of FPOs in marketing of selected fruits and vegetables in Telangana state
2. To study the business performance of selected fruit and vegetable based FPOs in Telangana state
3. To document the success stories and problems of horticultural based FPOs

Hypotheses:

1. Marketing practices followed by the good performing FPOs and Non-performing FPOs are similar.
2. Marketing costs incurred by the good performing FPOs and Non-performing FPOs are similar.
3. Business ratios of good performing FPOs and Non-performing FPO are not different.
4. The problems faced by good performing FPOs and Non-performing FPO are not different.

Scope of the study

The results of the study provide information on marketing and business analysis of the selected FPOs dealing in fruits and vegetables in Telangana state. To throw light on the marketing efficiencies of the FPOs in Telangana state. The marketing efficiency analysis helps to identify the better FPOs that could be role models for the budding FPOs. Further, the study also looked into a business analysis of the FPO. Finally, the outcome of the study would reveal the difference in marketing and business activities performed by the better performing and non-performing FPOs in Telangana state.

Limitations of the study

The present study is based on the data collected through personal interview using a pre-tested schedule for the problems and challenges faced by the FPOs that are dealing with selected horticultural crops. Therefore, some amount of recall bias is bound to be associated with the data since some of the issues were not recorded. However, efforts were made to minimize them through cross checks at the time of data collection. The degree of discrepancy if any would be negligible as the estimates presented are in averages. Since, the information was collected in Telangana state, generalization of the results to other areas should be made carefully keeping in view the agro-ecological similarity.

1.10 Presentation of the study

The thesis is organized into **six** chapters. The **first** chapter provides a brief introduction along with the specific objectives. In chapter **two**, some pertinent reviews are presented in consonance with the study objectives. Chapter **three** describes the main feature of the study area, sampling framework, database and analytical tools employed in the analysis of the data. The empirical results pertaining to study and critical discussion of results are presented in chapter **four**. Chapter **five** summarizes the major findings of the study with policy implications. Finally, chapter **six** on references listed all the literature referred in the present study.

REVIEW OF LITERATURE

CHAPTER II
REVIEW OF LITERATURE

A thorough analysis of the previous literature is helpful to know the concepts, problems, methodologies and analytical tools to be used for any research. In this section, an effort is made to review the significant literature appropriate to the current study from the point of view of the methodology used and its significant conclusions.

This will be presented in three sections:

1. Practices and efficiencies of FPOs in marketing of selected fruits and vegetables
2. Business performance of selected fruit and vegetable based FPOs
3. Success stories and problems of horticultural based FPO

2.1 Practices and efficiencies of FPOs in marketing of selected fruits and vegetables

Subbarao (1978) indicated that horizontal integration of wholesale markets did not ensure competitive prices for the farmers. In villages characterised by the low level of infrastructure development coupled with the low staying power of farmers, competitive forces were weak providing opportunities to millers to make abnormal profit.

Rondot *et al.* (2001) concluded that the key factor which enabled institutional change to lead an effective partnership was the existence of farmers' organizations that were well structured and empowered, offered real prospects to their members and were capable of negotiating with other partners. Producer organizations needed an effective communication program to access external information, circulate information to members and other producer organizations and access national and international market and policy information sources. Capacity building of producer organizations is a slow and uneven process regulated by existing social behaviour and cultural norms, not by economic principles alone.

Bijman (2002) studied the marketing co-operative as a particular type of institutional arrangement in the agri-food chain. Marketing cooperatives played a major

role in the agricultural sector of most industrialized countries. In the Netherlands, 84 per cent of all milk was processed by co-operative dairy companies, 64 per cent of all sugar beets were processed by co-operative refineries, and 95 per cent of all cut flowers and potted plants were sold through co-operative auctions. Also in other European countries, a large part of agricultural production was processed and sold through cooperatives. As market conditions for agricultural and horticultural products were changing, many questions have been raised about the efficiency of the marketing cooperatives.

Bingen *et al.* (2003) identified the importance by examining the extent to which different types of investments influenced the capacity of farmers' organizations to make their own social and economic choices and thereby become full actors in the market. In contrast to technology-driven efforts, this type of investment value encouraged them to learn to deal with a broader set of actors and market opportunities. Based on this investment, access to agricultural goods and services tended to be demand-driven as farmers played a key role in identifying their needs, and in capitalizing on and managing their organizations.

Sautier and Bienabe (2005) conducted a study on the role of small scale producer organizations to address market access. The study revealed that the potential of horizontal cooperation for sustaining market access pathways for small-holder producers was not just a matter of cost-sharing mechanisms or economies of scale, but deserved high priority by donors, governments and NGOs and involvement from the private sector to develop a large array of innovative support strategies.

National Resource Centre for Rural Livelihoods (2007) conducted a workshop on "Linking Small Farmers to Markets" and concluded that the producer companies had a distinct advantage since it allowed professionals to take part in governance as directors, which helped to bridge the information asymmetry between the producer directors and professional managers. Producer companies provided us with the opportunity of retaining the unique characteristics of a cooperative enterprise even as it enabled flexibility in business operations that was not available under the Cooperative Act. There are undoubtedly going to be challenging as in the case of cooperatives. Other problems would

arise as a producer company created its space in the marketplace. These are only natural and only professional management would be able to ensure that adequate commercial benefits accrued to all stakeholders.

Mittal (2007) indicated that government intervention was required to create a policy environment that would ensure a mutually beneficial relationship between the farmers and the organized sector. Along with investment in infrastructure, the development of extension activities and linkages with farmers was also important areas where the government can play influential roles. SAFAL Market has in a short period, increased integration among growers, wholesalers and retailers resulting in a cooperative market system in contrast to present traditional wholesale markets.

Patil *et al.* (2007) in their study on price spread in the marketing of capsicum in the Thane district of Maharashtra state identified the marketing channels and problems encountered by farmers in capsicum marketing and price spread. They identified the following three marketing channels, channel-1: Producer-wholesaler-retailer-consumer, channel-2: Producer-village trader-retailer-consumer and channel-3: Producer-retailer-consumer. Further, they concluded that most of the capsicum producers sold their produce through channel-1 (99.22%) followed by channel-2 (0.86%) and channel -3 (0.22%). Producer's share in consumer's rupee was found to be highest in channel-3 (49.6%) and was lowest in channel -1 (27.28%). The percentage of total marketing cost was more in channel-1 (72.72%) followed by channel-2 (62.80%) and channel-3 (50.33%). They also reported that the high cost of packing materials (95%), was the major problem followed by low prices (87.50%), further placement in wholesale market (77.59 %), lack of market information (60 %), transportation losses (52.50%), unsatisfactory marketing methods (47.55%), wide price fluctuations (40%) and malpractices followed in the market (25%).

Hellin *et al.* (2008) conducted a study on farmer's organizations which revealed that the benefits of farmer organization were more evident in the fruits and vegetable sector, characterized by high transaction costs associated with market access. However, horticultural farmer organizations in Honduras and El Salvador included less than 5 per cent of total horticultural producers. This was possibly due to farmer organizations' limited

business skills and non-replicable organizational models. There was less incentive for maize farmers to organize to access output markets as the transaction costs were relatively low. The benefits of maize farmer organization were clearer when it came to accessing inputs such as credit, seed and fertilizer.

Barham and Chitemi (2009) studied farmer's groups and found that because of the small size of operation, small farmers were not only able to create scale economies and had low bargaining power because of low quantities of marketable surplus. They also lacked capital, knowledge, information and market access, and suffered from market imperfections, poor infrastructure and communications.

Szabo (2009) proposed that producer-owned organisations as good examples of the vertical integration based on the horizontal coordination of farmers as initiators as they proved that by cooperation there was an opportunity to significantly improve their countervailing power and to establish ownership for farmers in the upper part of the food chain if they can secure strict quality requirements, solid financing, loyalty and trust in their organisations.

Moustier *et al.* (2009) conducted a study on the role of farmer organizations supplying supermarkets with quality food. This study revealed that farmer associations that work in the form of private commercial organisations were regular supermarket suppliers for the selected products and their ability to supply supermarkets related to the combination of functions they made available to their members, especially with regards to quality control and promotion. Farmer organizations not only supplied to supermarkets but also to the public.

Murray (2009) conducted a study on linking farmers producing rainfed crops with markets and revealed that a model of organizing farmers into producers collectives at the village level for aggregation of produce with some degree of initial processing and linkages of these collectives with retail chains can ensure elimination of several layers in the market channel, thereby increasing the share of a farmer in the consumer’s rupee.

Elisabeth and Matin (2011) studied linking small to markets and concluded that farmer groups had a greater capacity to implement innovations and absorb innovations and exchange information. Collective marketing led to a reduction in external transaction costs by exploiting economies of scale in selling.

Anika and Markus (2012) have put out the analytical framework concerning arguments from the value-chain governance and the collective-action debates that emphasised structural characteristics of agriculture in India and the regulatory framework on which the concept of producer companies was based. A case study of Vasundhara Agri-Horti Producer Company (VAPCOL) was presented and analyzed about the success of this producer company in empowering farmers and improving their livelihood and concluded that producer companies were a promising new model of the small farmer's organization, but one which needs continued support and further critical analysis.

Anika (2014) has conducted a study on linking small farmers to modern retail markets through producer organizations and revealed that farmer's organizations could help smallholder farmers especially in improving their position in emerging value chains. Producer's companies are a promising tool to strengthen farmers' position in their supermarket chains thereby increasing their incomes.

Babalola (2014) investigated the role of corporate governance in cooperative financing in Nigeria. Three of the most important cooperative governance mechanism such as transparency, accountability, internal control and risk management were examined and he determined the executives of cooperative societies showed good commitment toward accountability and assessed the significance of member's participation in the democratic process giving room for the emergence of incompetent individuals on the executive and board of cooperatives.

Chauhan (2015) conducted an evaluative study on producer companies and showed that producer companies were involved in vigorous forward and backward linkages. Banks did not lend to producer companies as they were not having collateral security.

Evengy and Thomas (2016) conducted a study on networks of rural producer organizations and concluded that they were confronted with several limitations caused by insufficient capital endowments, weak information channels inside the organization, problems with local leadership and low member contribution.

Panda and Singh (2016) felt that to help small scale farmers gain maximum benefits out of their agricultural production efforts, their activities needed to be integrated. For this integration, the extension role was of paramount importance as principles of the extension were encouraging for farmers' collective actions and a renewed opportunity to act in groups by forming farmer producer organizations. These critical considerations may be achieved through the extension roles of locating farming community, awareness creation and community mobilisation, organising community meetings through local leaders, social capital formation, facilitating the formation of the core group, capacity building of farmers, facilitating registration, arranging training for the board of directors and chief executive officers, technical support and ensuring market access.

Shivani *et al.* (2017) conducted a study on FPOs for promoting processing food and concluded by conducting a SWOT analysis that FPOs have the threats like big fluctuation in market price, competition from local traders, poor and unstable macroclimate and changes in government policy.

Vignesh (2019) in their study examined the role of value chain actors and Farmer Producer Organization by mapping the value chain of millets and constraints faced by farmers in production of millets and retailers. The primary data was collected from 60 farmers, one millet-based FPO and three FPO retailers through a random sample and data was gathered using a well-structured interview schedule. The roles of actors were created using generic worksheets and value chain of millets and the constraints faced by farmers were examined using Garrett's ranking technique. The study results that revealed that farmers are not involved in the value addition for their produce. *i.e.,* Monsoon failure, erratic rainfall and the non-availability of the quality seeds were the major constraints faced by the farmers.

Nirgude *et al.* (2020) conducted a study on the economic analysis of farmer-producer –organization (FPO) through a case study of Abhinav farmers group, Narayangaon, Pune in Maharasthra. Abhinav farmers group is the organization, which helps linking small and marginal grape growers to export market. An attempt was made to measure the economic performance and financial feasibility of investment in Abhinav Farmers Group by using different financial tools and ratios. The results revealed that average per hectare yield obtained of grape crop was 204.64 and 211.31 quintals, for member and non-member growers respectively while the B: C ratio was 1.42 and 1.30 respectively. The time required for the project to pay for the grapes grower of abhinav group. payback period and benefit cost ratio of Abhinav group was 18.4 years and 1.32 at 30 per cent of discount rate, respectively. The internal rate of return and break-even quantity of export of grape for Abhinav farmers group was 32.10 per cent and 65.56 tones, respectively.

FPOs that were well structured and empowered, offered real prospects to their members and were capable of negotiating with other partners. Mittal (2007) indicated that government intervention was required to create a policy environment that would ensure a mutually beneficial relationship between the farmers and the organized sector. Anika (2014) has conducted a study on linking small farmers to modern retail markets through producer organizations and revealed that farmer's organizations could help smallholder farmers especially in improving their position in emerging value chains. Chauhan (2015) conducted an evaluative study on producer companies and showed that producer companies were involved in vigorous forward and backward linkages.

2.2 Business performance of selected fruit and vegetable based FPOs

Parliament *et al.,* (1990) studied the performance of cooperatives and investor-owned firms (IOF) in the Dairy Industry. Financial ratios of cooperatives were calculated using financial statements gathered from 1971 to 1987 from nine U.S dairy cooperatives. Similar ratios for IOF were derived from the group of Dairy Product Processors. The performance of dairy cooperatives in terms of leverage, liquidity, coverage and efficiency ratios was observed to be considerably greater than the ratios of dairy IOFs and not worse

in terms of profitability. This study concludes that to evaluate performance on cooperative-specific objectives that are not captured by financial ratio analysis, it is necessary to analyze non-market aspects of cooperative behaviour by understanding the performance of cooperatives and provide decision-makers and policymakers with new tools for assessing cooperative behaviour.

Gentzoglanis (1997) used ratio analysis to study the economic and financial performance of cooperatives and investor-owned firms. There were no major distinctions between the two organizations of businesses in profitability, and productivity, while there seem to be important variations in liquidity management and working capital accountability. While this research discovered that there was no indication that debt was excessively used by the IOFs but many acquired debt in the 1980s owing to the rise of current financial instruments such as junk bonds. Empirical studies indicated that small inventory and current assets are used by IOFs. On the contrary, cooperatives hold high levels of inventories and current assets. This difference makes cooperatives have more difficulties in obtaining loans and is generally more risk-averse than IOFs.

Kale *et al.,(*2000) evaluated Financial Position and work efficiency of dairy Cooperatives. The research considered 23 dairy cooperatives and used ratio analysis. Owned Funds, Borrowed Funds, Working Capital, and Gross Profit were regarded for research, and the research discovers that owned capital was on the lesser hand, meaning that dairies relied strongly on borrowed funds. The research shows that a big percentage of the revenue came from trading operations and that the working capital structure of the dairy cooperatives under research was bad whereby dairy cooperatives could not make payments to their dairy suppliers.

Adrian and Green *et al*. (2001) analysed the Agricultural Cooperative and its Business Environment and indicated that 80 per cent of agricultural cooperatives used financial ratios to assess activities and their performance in Georgia, with the overall assessment covering liquidity, solvency, profitability and efficiency. The research recorded efficiency of 78.1 Per cent, liquidity of 59.4 per cent and solvency of 53.1 per cent. The research indicates that a skilled and knowledgeable manager will function as an essential

element in implementing company procedures intended to create potential cooperatives feasible and effective enterprises that efficiently meet member requirements.

Kulandaiswamy and Murugesan (2004) evaluated the performance of India's Primary Agricultural Cooperative Credit Societies (PACS) based on eight factors: membership, share capital, working capital, disbursement of loans, funds, borrowing, demand and over dues. Out of the 30 PACS investigated, 7 units (23.3 Per cent) performed well, while 12 units (40 Per cent) participated in the moderate group and 11units (36.7 Per cent) performed poorly. The empirical evidence suggests that suitable strategy interventions are required to remedy the defect through measures such as recapitalization, merging, reduction of over dues and improvement of overall efficiency.

Hardesty and Salgia (2004) analysed the Financial Performance of Agricultural Cooperatives and Investor Owned firms using ratio analysis. They found that Agricultural cooperatives' profitability ratios were better than IOF competitors. For the related sectors, relative performance differed from the precise profitability measures, Cooperatives steadily maintained less leverage than their IOF counterparts, the explanation for cooperatives' lower leverage levels relates to the point that it was much more difficult for cooperatives than IOFs to spread their risks by spreading into other business activities. This study used financial ratios to show that cooperatives had lower asset efficiency than their IOF counterparts in three of the four sectors. This study concludes that cooperatives had the strongest relative financial performance and they had less leverage than IOF, and their relative performance would get better about liquidity and asset utilization.

Esham and Usami (2007) evaluated the performance of farmer companies in Srilanka. This study disclosed that farmer companies as an organization have failed to accomplish a great deal about the development of agriculture. This study revealed that the farmer companies as an organisation have struggled to achieve much concerning the commercialization of agriculture. This research states farmers' perception of the farmer company as a service provider and the restrictions on share ownership by outsiders from the irrigation scheme have limited the capital necessary for expanding the commercial activities of the farmer company is the important reason. The awareness gap between the

shareholders and the farmer company led to low farmers' participation in the farmer's supported business activities. The farmer's investment structure can be reinforced by raising the number of shares per farmer and reducing the share ownership constraints from outside the irrigation scheme. This research indicates that the share ownership of the agri-business sector in the farmer company should be restricted to maintain the independence of the farmer company to allow the farmers to have the farmer company's controlled benefit.

Pujari *et al*. (2009) studied the performance of primary agriculture cooperatives in Karnataka. The data and information needed were gathered from the released annual reports for the period 1996-2006, the data was analyzed using growth rate, average and percentage. This research revealed a rise in payments and an enhancement in loan recovery. The study concludes that the performance of primary agriculture co-operative societies in Karnataka showed improvement in paid-up share capital, deposits, the pace of deposit mobilization, size and composition of working capital, credit-deposit ratio and recovery performance of credit over the years.

Katchova and Enlow (2013) analyzed the financial performance of publicly-traded agribusinesses and examined how publicly-traded agribusinesses perform financially compared to other firms. The writers estimated that in terms of financial ratios linked to profitability, liquidity, and price proportions, agribusinesses outperform all firms, but have significantly reduced liquidity and debt ratios. They used Du Pont analysis, which demonstrates that greater equity returns for agribusinesses are mostly related to greater asset turnover ratios, showing greater agribusiness operating efficiency, making them important businesses in an investment portfolio. This study found that the strong financial performance of food processing agribusinesses makes them valuable investing options, particularly during the economic recession. This study concludes that considerable strength exists in agribusinesses compared to all firms in terms of financial performance.

Chauhan (2015) analysed Producer Companies in Madhya Pradesh. The efficiency of producer companies was analysed on the grounds of a few measures such as the number of shareholders, annual turnover and net profit. The study indicated that companies with

total shareholders do great in their district by offering benefits to more members, banks and financial institutions do not lend to producer businesses because they do not have collateral security.

Sanjay Kumar *et al*. (2018) analysed the performance of the FPOs in different regions of Chhattisgarh and suggested that Government support in the form of grants to the FPOs during the early stage should be made available. Exemption from corporate tax at least for initial few years and the inclusion of financing agency on the board of FPOs can also help. FPOs can be treated as nonbanking financial company to provide loans to farmer members.

Amitha *et al.* (2021) studied the performance of the FPOs in medak district of the Telangana. Which investigates the profile characteristics of FPOs and its members, in terms of farm size and income and other important governance parameters It was observed that FPOs were comprised of middle aged farmers who completed primary education belonging to same caste category where as in FPO promoted by ICRISAT young aged farmers who completed higher secondary level education coming from different communities.

Esham and Usami's study revealed that the farmer companies as an organisation have struggled to achieve much concerning the commercialization of agriculture. Hardesty and Salgia (2004) analysed the Financial Performance of Agricultural Cooperatives and Investor Owned firms using ratio analysis. They found that Agricultural cooperatives' profitability ratios were better. Chauhan's study indicated that companies with total shareholders do great in their district by offering benefits to more members, banks and financial institutions do not lend to producer businesses because they do not have collateral security.

2.3 Success stories and problems of horticultural based FPO

Gra *et al.* (1989) identified three significant categories of problems in the associations they studied. The problems were described as related to agricultural production, marketing, and management. In the first group, there were problems related to

poor cultural practices and insufficient capital. In the second category, problems related to prices, lack of transport and storage facilities, lack of communication, and lack of a secure and guaranteed market were present. In the final group, when the associations were member-driven only a few farmers understand the system of management, thereby placing a lot of responsibility in very few people's hands.

Srivastava *et al.* (1989) conducted a study to identify the constraints in pulse production in the Tal region of Bihar. The study showed a lack and inadequate supply of improved seeds as the major constraints in the study area. Therefore four district components of technological improvements recognised in the study area were the adoption of improved seeds, seed treatment practices, use of plant protection measures, and intensive use of machine labour for different farm operations.

Bhatia (1991) recorded some of the important economic constraints which retard the growth of pulse production in India. They were produced in rain-fed situations with low yield and value productivity, higher risk associated with pulse cultivation, low level of technology adoption and susceptibility to pests and diseases. From the point of marketing, the most important problem was the large price spread. To increase the yield per hectare, appropriate measures might have to be taken up for reducing/shifting the risk of adopting new technology through the expansion of crop insurance schemes to cover pulse crops. Efforts should also be made to improve the efficiency of marketing so that producers could get their due share in the prices paid by the ultimate consumer.

Bebbington *et al.* (1994) in their work on farmer and community organisations in agricultural research and extension: functions, impacts, and questions identify that the major problems faced by FPOs were related to costs and sustainability.

Singh and Mohiley (1995) in their study on "a comparative analysis of costs and margins for different channels in the marketing of arhar" reported the costs and margins in different channels in the marketing of arhar (1975-1995) in Allahabad. They found that the producer's share in the consumer's rupee was more or less the same in both the above periods.

Lal and Prakash (1996) in their study on economic constraints in pulse marketing stated low marketable surplus and large price spread as the difficulties in marketing. Most of the farmers grow pulses for their domestic requirements on a limited area which resulted in a low marketable surplus and the farmers sold the produce at the village level only to the village traders who offer a lower price. The data collected on the price spread at Kanpur shows that the producer's share in the consumer's rupee remained as low as ₹ 60.69 and ₹ 50.78 in pigeon pea and chickpea respectively. The problems would be eradicated by appropriate transfer of technology for cultivation of pulses under dry farming or limited irrigation agriculture, expansion of crop insurance schemes to cover pulse crops and improving the marketing efficiency so that the producers could get their due share in the prices paid by the ultimate consumer.

Snehalatha and Reddy (1998) listed the problems faced by group members as selling the product without assured market outlets, lack of cooperation and teamwork among group members, non-availability of sufficient matching grants in time, ineffective group leadership, lack of training in group formation, unequal work delegation, mismanagement of accounts, discontinuance of internal lending. The problems perceived by group leaders were lack of time to perform home, farm and group activities, no reimbursement of money spent for group purposes, explaining accounts to illiterate members, resolving group conflicts, misunderstanding of group members that leaders benefit more and there were no economic incentives for being a group leader.

Arun (2004) reported that the problems faced by the members of SHGs were lack of timely support from banks/other organisations (it was the major problem), an inadequate number of organisations linked up, unequal distribution of work among members, non-introduction of agriculture-based income-generating activities (IGA), non-availability of information about IGA, and difficulty in getting external loans.

Raghu Prasad *et al*. (2004) in their study conducted in Shivamogga district reported that internal problems faced by some groups were lack of good leadership, conflicts among its members, time constraints, lack of decision making, inadequate space to conduct activities, etc.

Bharathi (2005) reported that the problems faced by members were lack of formal education, lack of training, lack of social mobility, insufficient loans as their economic problems and technical problems like non-availability of spare parts, shortage of electricity and unskilled women group members.

TISS (2005) reported that smallholders across Asia did not appear to be unifying in large numbers due to a greater proportion of better-off farmers having formal membership than smallholders.

Chandargi (2007) reported that the majority of the members expressed constraints like lack of assistance from organisations, the insufficient margin of profit, lack of infrastructure facilities for selected activities and high market cost of raw materials. The majority of the members suggested a single outlet for marketing, marketing facilities to be improved and quick release of the loan.

Dhakal (2013) concluded that farmers' organisations collapsed due to the lack of ownership, group management skill and inability to link with the market The business skills, technical skills, and organisational management skills of Agricultural Resource Centers (ARC) members were not promoted parallel. Autonomy and adequacy of time given to select the enterprise for groups have a long term impact on ownership development. A high level of external influence leads ARCs to dependency and lack of problem-solving ability among members

Gundlach (2013) concluded that constraints could be internal or external to the system. Internal constraints were those constraints found within the organisation which give a setback to the effective and efficient performance of the organisation. Internal constraints include physical constraints (it includes the scarcity of resources, machines, and buildings needed to convert resources into an end product), people constraints (lack of skilled people limits the organisation) and policy constraints (a written or unwritten policy, organisational procedures might prevent the organisation from achieving its goal) Bernard and David (2015) concluded that several RPOs still struggled to offer the type of commercialisation services that would lead to higher output prices for their members and

it also argued that trust in leaders' motives and competence as well as trust in ordinary members were crucial for successful collective commercialisation as a form of collective action.

Mohanakumara *et al*. (2016) conducted a study on the adoption of post-harvest management practices in pigeon pea crop for sustainable income in the Kalaburagi district of Karnataka and reported that the majority of the respondents faced the problem of high fluctuation in market prices (71.66 Per cent), followed by non-availability of processing units at village level (45.83 Per cent), and inadequate storage facility at village level (35.83 Per cent).

Rajput *et al*. (2016) explained that the higher perceived constraints in the technological gap of cultivation of improved recommended practices of red gram faced by the farmers were a shortage of water, non-availability of labour in time, inadequate source of finance, high cost of improved variety seed, fertilizer, FYM and herbicides, high labour charges, non-availability of the storage facility, high charge and non-availability of the storehouse, fluctuation price of red gram in the market, irregular demand of red gram, non-remunerative price during the time of glut in the market and high transport cost.

A study conducted by Navaneetham *et al* (2019) on Analysis of constraints for performance improvement of FPCs in Tamil Nadu revealed that capturing the market for selling the produce was the biggest constraint with a value of 0.93 followed by not able to raise funds from farmers with a value of 0.82. The third major constraint was the cumbersome process of registration by FPCs that ranked third (0.77) followed by no waiving of license fee and problem with obtaining bank loan with values 0.73 and 0.60 respectively.

Chopade *et al* (2019) conducted a study on constraints faced by the members of Farmer Producer Company. The study was conducted in Osmanabad district of Maharashtra state. A total of 120 farmers were selected for this study. The results showed that 72.86 per cent of the respondents reported non-inclusion of local leaders in FPCs, 69.28 per cent of respondents reported lack of coordination for different group activities,

55.00 per cent reported lack of support from the government department after the establishment of FPCs. Forty per cent reported political affiliation of members, 30.71 per cent reported that banks are not very familiar with the concept of FPCs, these companies have limited access to banks, 21.43 per cent reported inadequate profit to individual members and 10.71 per cent of the respondents reported that village-level workers were not providing enough information about all schemes related to FPCs.

Singh and Mohiley's study found that the producer's share in the consumer's rupee was more or less. Raghu prasad reported that internal problems faced by some groups were lack of good leadership, conflicts among its members, time constraints, lack of decision making, inadequate space to conduct activities, etc. Mohanakumara indicated that the problem of high fluctuation in market prices (71.66 Per cent), followed by non-availability of processing units at village level (45.83 Per cent), and inadequate storage facility at village level (35.83 Per cent).

METHODOLOGY

CHAPTER III
METHODOLOGY

This chapter presents a brief description of the sampling procedure adopted, the method of data collection used for getting information from the sample and the statistical tools and techniques used for data analysis in the study. The basic terms and concepts involved in the study are also presented in the chapter. The study was carried out in the Telangana state of India for the agricultural year 2020-21. The methodological plan used for the present study has been presented under the following heads:

3.1 Description of the FPOs in India

3.2 Description of FPOs in the study area, Telangana state

3.3 Sampling procedure

3.4 Nature and sources of data

3.5 Analytical tools and techniques

3.1 Description of the FPOs in India

In India, there is a need to facilitate our farmers with access to improved technology, credit, better input and more markets to incentivize them to produce the better quality commodity. For this, the aggregation of small, marginal and landless farmers into FPOs will help enhance the economic strength & market linkages of farmers for enhancing their income. Keeping this in mind, the Government of India has launched a new Central Sector Scheme titled "Formation and Promotion of 10,000 Farmer Produce Organizations (FPOs)" with a clear strategy and committed resources to form and promote 10,000 new FPOs in the country with a budgetary provision of Rs 6865 crore. In India, there were around 7059 FPOs during 2021. These FPOs are promoted by different organizations like Small Farmers Agri-Business Consortium (SFAC), National Cooperative Development Corporation (NCDC), National Bank for Agriculture and Rural Development (NABARD), National Agricultural Cooperative Marketing Federation of India (NAFED), North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC), Tamil Nadu-Small

Table 3.1: FPOs in India in 2021

S. No	State/UTs	Number of FPOs registered by respective agencies			
		Small Farmers' Agri-Business Consortium (SFAC)	NABARD	Other implementing agencies	Total
1	Andaman & Nicobar	00	03	00	03
2	Andhra Pradesh	16	295	88	399
3	Arunachal Pradesh	06	10	12	28
4	Assam	18	72	95	185
5	Bihar	38	217	101	356
6	Chhattisgarh	26	57	61	144
7	Delhi	04	01	00	05
8	Goa	02	02	01	05
9	Gujarat	25	190	140	355
10	Haryana	23	85	93	201
11	Himachal Pradesh	08	99	67	174
12	Jammu & Kashmir	02	23	64	89
13	Jharkhand	10	150	96	256
14	Karnataka	125	287	166	578
15	Kerala	00	134	36	170
16	Ladakh	00	00	03	03
17	Madhya Pradesh	149	254	147	550
18	Maharashtra	105	291	173	569
19	Manipur	08	12	16	36
20	Meghalaya	03	12	10	25
21	Mizoram	01	19	14	34
22	Nagaland	02	05	16	23
23	Odisha	41	241	165	447
24	Punjab	07	93	22	122
25	Puducherry	00	00	02	02
26	Rajasthan	50	166	135	351
27	Sikkim	30	08	02	40
28	Tamil Nadu	13	264	133	410
29	Telangana	26	335	99	460
30	Tripura	07	01	23	31
31	Uttara khand	07	90	57	154
32	Uttar Pradesh	57	183	210	450
33	West Bengal	89	305	10	404
Total		898	3904	2257	7059

Farmers Agri-Business Consortium (TN-SFAC), Small Farmers Agri-Business Consortium Haryana (SFACH), Watershed Development Department (WDD)- Karnataka & Foundation for Development of Rural Value Chains (FDRVC)- Ministry of Rural Development (MoRD).

3.2 Description of FPOs in the study area, Telangana state

In the state of Telangana, 460 FPOs have been promoted by various agencies such as SFAC, NABARD, SERP, State Govt. Departments and NGOs. It has been noticed that 335 FPOs in Telangana state have been promoted by NABARD, which makes NABARD the major promoter of FPOs in Telangana state. NABARD regional office in Telangana state partnered with a large number of NGOs to achieve this number in forming the FPOs. In addition to NABARD's partnership with POPIs, some of the resource organisations have been identified as "Resource Support Agencies" for FPOs. Most of the FPOs are performing in input marketing only where as some progressive farmer FPOs are working in Horticulture crops. So that further studies in the Horticulture based FPOs may encourage farmers of Telangana state to take up new FPOs and also existing FPOs may extend their operations in fruits and vegetable output marketing.

Telangana state has considered agriculture as its primary goal to improve farmer community wellness by educating farmers on the latest technical knowledge, and training farmers to boost agricultural production and productivity. The agro-climatic conditions of Telangana are suitable for perennial fruit crops like mango, citrus, guava, banana, vegetables and flowers etc. There is a vast scope for enhancing the area under fruit crops from the existing 3.79 lakh ha. to 10.00 lakh ha. Enterprising and progressing farmers are willing to adopt new technologies i.e. Green houses, mulching, drip automation etc. The state is also having a high export potential for mango, bananas, vegetables and flowers. Telangana state has the potential to become an export hub. All these aspects motivated the upliftment and formation of the FPOs in 33 districts of Telangana state.

Small and marginal farmers in India face many obstacles right from land ownership, It is very apparent that most of the farmers in Telangana (84.9 Per cent are marginal and small farmers) hold about 55.45 per cent of the land under cultivation with less than one

acre (about half a hectare) for each farmer. So, the situation after dividing the land between their offspring will make further fragmentation. Uneconomic land holdings have emerged, making agriculture an unattractive operation. Being aware of this situation, the Government of India and the Telangana governments have provided FPOs with certain incentives and opportunities in the value chain to grow and stabilise. So this study would help the existing and newly formed FPOs to channel the funds and overcome the problems.

3.3 Sampling procedure

Multistage purposive random sampling technique was employed to select the study region, study area and other primary sources of data from various stakeholders. In the first stage, Telangana state was selected purposively for the study as it was one of the important states which is promoting the FPOs by various organisations. In the second stage, out of 460 FPOs operating in Telangana state, 283 FPOs performing output marketing have been selected. The remaining FPOs relied on input marketing as per the objective demands. In the final stage, FPOs performing output marketing in the horticulture crops were shortlisted as a population to collect data on the performance of FPOs. It was observed that only 106 FPOs were performing output marketing in horticultural crops. Further, these 106 FPOs were grouped based on the business turnover. Later on selected FPOs were placed in the two groups viz. Good performing FPOs (GPFPOs) and Non-performing FPOs (NPFPOs) and sample were drawn from these strata. FPO which is having highest no of marketing channels and direct marketing was selected for the success story, and this FPOs has been running its operations in organic farming.

3.3.2 Nature and sources of data

For evaluating the objectives of the study, the required data were collected through personal interview method with the help of pre-tested schedule. The primary data with respect to general characteristics, costs and margins of marketing channel selected commodities traded by FPOs, sales of produce, price received, marketing costs, procurement procedure, the problems involved were collected from FPOs. Seven FPOs each from group of Good performing FPOs (GPFPOs) and Non-performing FPOs (NPFPOs) were selected randomly from the list derived earlier and the details of FPOs selected is presented in the Table 3.1 & 3.2.

Table 3.2: Selected FPOs to study the performance in Telangana state

Sl. No.	Good performing FPOs	Address
1	Kollapur Farmers Producer Company Limited	H. No. 2-20-140, Near Old Police Station Kollapur Telangana 509001
2	Aadharsa Enabavi Farmers Producer Company Limited	2/12 Kallem Village, Lingala Ghanapur Mandal Warangal Telangana 506201
3	Wanaparthy Girijana Fruit Producer Company Limited	H. No. 18-113/4c, Raghavendra Colony Kothakota Wanaparthy Mahbubnagar Telangana 509631
4	Maldakal Farmers Producer Company Limited	H.No. 4-20/A, Maddelabanda Gadwal, Maldakal Mahbubnagar Telangana 509132
5	F3 Farmers Producer Company Limited	7-1-155-D, Amulya Colony Panagal Road Nalgonda Telangana 508001
6	Nelathalli Farmers Producer Company Limited	3-91 Yadav Bazar Velmajala Nalgonda Telangana 508101
7	Kattangur Farmers Producer Company Limited	Aitipamula k. Gurh. No. 78 Kattangoor Nalgonda Telangana 508205
	Non-performing FPOs	**Address**
1	Narayanapur Farmers Producer Company Limited	H. No. 4-4/1, Madanapally Vikarabad Rangareddi Telangana 501101
2	Nakrekal Farmers Producer Company Limited	H.No.20-110 S L B C Road jk Nakrekal Nalgonda, Telangana 508211
3	Bhuvanagiri Farmers Horticultural Producer Company Limited	H No: 3-2-86/4/A, Amr Nagar, Bhuavanagiri, Nalgonda, Telangana 508116
4	Adilabad Farmers Producer Company Limited	1-44, Singapur, Beside Peddamma Temple, Khanapur, Adilabad Telangana 504310
5	Gurrampode Farmers Producer Company Limited	H No: 9-1, Brahamana Gudem, Gurrampode Nalgonda, Telangana 508256
6	Pentlavelli Farmers Producer Company limited	11-59, Pentlavelli Konduru Mahabubnagar Mahbubnagar Telangana 509105
7	Madapur Farmers Producer Company Limited	H.No - 19-105, Near T Acharya House, Laxmitakies, Bs, Achampet Nagar, Kurnool Mahbubnagar, Telangana 509401

Fig. 1: Map of Telangana State

Data: Data was collected from the selected FPOs through its respective presidents/office bearers. Data were collected with a detailed interview of the presidents and members of FPOs with the help of pre-tested schedules regarding the marketing and business activities of the FPO. Financial details of FPOs were collected from officials and members of respective FPOs. The data regarding the number of FPOs in state and country was obtained from Small Farmers' Agribusiness Consortium (SFAC) and National Bank for Agriculture and Rural Development (NABARD). For recording the success story of the better performing FPO, data was collected from the CEO of the FPOs by simple questionnaire. Some of the secondary data was collected from the sources like nabard.org, sfacindia.com, mca.gov.in etc.

3.5 Analytical tools and techniques

3.5.1 Descriptive statistics

Simple statistical tools like averages, ratios and percentages were used to calculate and compare the financial ratios, marketing activities and costs involved and also to contrast and interpret results appropriately.

3.5.1.1 Averages: The averages of literate, male, female and total members of FPOs in both the better performing and non-performing FPOs are calculated for the better comparison. Also, the average marketing efficiencies of the two groups are calculated from the collected data

3.5.1.2 Ratios: Ratios are being used in the calculation of various financial ratios for the FPOs like current ratio, acid-test ratio, debt-equity ratio and net capital ratio etc. Presentation of the data in the form of different ratios gives a clear picture of the data in a simplified manner that can be easily interpreted.

3.5.1.3 Percentages: The percentage is used in different parameters for better and easy representation of data and also percentages help in easy comparison irrespective of the units of the parameter.

3.5.1.4 Tabular analysis: To make comparisons easier, the data was presented in a tabular format. Simple tabular analysis was utilized to examine the average members in the FPOs and literacy, turnover etc. the marketing costs and margins, and the financial ratios were also presented in the tabular form for easy interpretation of the analysed data.

3.5.2 Marketing efficiency

Calculation of marketing efficiencies to know the better marketing practices. Marketing efficiencies was calculated through two methods shepherd's method and the Acharya approach. Later on, Average marketing efficiency has been calculated for both better performing and non-performing FPOs and compared to each other for a clear understanding.

3.5.2.1 Shepherd's formula: The efficiency of marketing practice can be calculated with the help of the following formula. The higher this ratio, the higher would be the efficiency and vice versa. This can be expressed in the following form:

$$\text{Marketing efficiency} = \frac{\text{Consumer's price}}{\text{Marketing cost + Marketing margin}}$$

3.5.2.2 Acharya approach : According to Acharya (2003), an ideal measure of marketing efficiency, particularly for comparing the efficiency of alternate markets channels should take into account all of the following:

$$\text{Marketing efficiency} = \frac{\text{Net price received by the farmer}}{\text{Marketing cost + Marketing margin}}$$

3.5.3 Financial Ratios

3.5.3.1 Current Ratio: This ratio indicates the degree of short term liquidity of the FPO. It shows whether current assets are adequate to satisfy current liabilities.

$$\text{Current Ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

A low current ratio is an indicator that a firm may not be able to pay its bills on time causing a slowdown in cash collections. A higher ratio may indicate an excessive amount of current assets and management's failure to utilize the firm's resources properly. The current assets included in this study are cash in hand, at the bank and bills receivables. The current liabilities included are borrowings and bills payables. It is generally accepted that a good current ratio should be between 1.5:1 and 2:1.

3.5.3.2 Acid- Test ratio: This ratio is called the quick ratio or near money ratio and represents the ratio between quick assets and current liabilities. It is computed as follows:

$$\text{Acid–test ratio} = \frac{\text{Quick assets}}{\text{Current liabilities}}$$

Where Quick assets = Current assets – Inventory

This ratio is a more stringent measure of liquidity than the current ratio because it excludes inventories that are the least liquids of current assets. The quick assets involve cash in hand, cash at the bank, receivable accounts and short-term deposits. Current liabilities include payable bills, other provisions and interest payments. For most firms, the ratio of 1/1 has been accepted as adequate.

3.5.3.3 Debt- Equity ratio: The debt-to-equity ratio compares a company's total liabilities to its shareholder equity and can be used to evaluate how much leverage a company is using. Higher-leverage ratios tend to indicate a company or stock with higher risk to shareholders.

$$\text{Debt Equity ratio} = \frac{\text{Total debt}}{\text{Total shareholders' equity}}$$

3.5.3.4 Debt-Asset ratio: Total-debt-to-total-assets is a leverage ratio that defines the total amount of debt relative to assets owned by a company.

$$\text{Debt- Asset ratio} = \frac{\text{Total debt}}{\text{Total assets}}$$

These two ratios show how much of the company's assets are financed by debts and equity and these two ratios provide important information about prospects of financing. In the above ratio, debt represents only long term liabilities and not current liabilities, while equity refers to net worth after deducting intangible assets. The lower value of the ratio indicates that the leverage effect will be restricted to the minor role of debt and major capital being equity.

3.5.3.5 Net capital ratio Net working capital (NWC) is the difference between a company's current assets and current liabilities and an indicator of the solvency of a business.

$$\text{Net Capital ratio} = \frac{\text{Total assets}}{\text{Total liabilities}}$$

This ratio is important to measure the overall solvency of the company and indicates the degree of liquidity of the FPO in the long run. It measures the degree of availability of assets to pay off the long term liabilities. This ratio would throw light on the real financial strength of the company.

3.5.4 Garrett ranking method

One of the objectives of the current research is to identify the problems faced by good performing and better performing FPOs. The FPOs were asked to rank the problems faced while running the FPOs. By reference to Garrett's chart, the ranks were later transformed into scores. Garrett's ranking approach was utilised in the study to examine the problems faced by good performing and better performing FPOs. The algorithm was used to convert the FPOs' orders of merit into rankings. Per cent position=100(Rij−0.5)Nj

Where Rij= Rank given for ith item by jth FPO

Nj= Number of items ranked by jth FPO

The per cent positions estimated were translated into scores by using the table given by Garret and Woodworth (1989). Thus, the scores of the numerous respondents were summed for each component, and the mean values were calculated. The descending order

of the mean values obtained for each of the characteristics was used. The qualities with the greatest mean value were deemed the most essential, with the remaining qualities following in that order.

FPO which has been found best among the selected FPOs was considered to document the success story and suggestions were taken from the FPO to help upcoming FPO to develop well. The success story of this better-performing FPO would help the different non-performing FPOs to perform better in the coming future.

RESULTS AND DISCUSSION

CHAPTER IV
RESULTS AND DISCUSSION

The present study embodies the results of the study concerning the marketing and business performance of good performing and non-performing farmer producer organisations in Telangana state. The major findings of the study are presented and discussed under the following sub-heads in order to test the hypotheses defined for the present study.

4.1 General characteristics of the selected FPOs in Telangana state

4.2 Examination of the output marketing practices of selected FPOs

4.3 Estimation of marketing efficiencies of the FPOs

4.4 Appraisal of the financial status of the FPOs

4.5 Problems faced by the selected FPOs in Telangana state

4.6 Documentation of the success story of good performing FPO

4.1 General characteristics of the selected FPOs in Telangana state

In the present study, FPOs were classified into two groups, viz. good performing FPOs (GPFPO) and non-performing FPO (NPFPO) and the present section examines the general characteristics of these FPOs which include basic details such as average members in FPOs, percentage of male and female members, percentage of literate members and turnover details like average turnover, average turnover per member and crop details like Number of crops traded, turn over per crop and operational detail like area of operation & years of operation are compared in Table 4.1.

4.1.1. Number of members: It is observed that the average number of members in GPFPOs was 130 per cent higher than the NPFPO and these numbers were 496 and 208 in GPFPOs and (NPFPO), respectively. The average number of female members in GPFPOs was 70 which constitute 14.19 per cent of total membership, whereas only 20 members in NPFPOs were female, which was 9.80 per cent of the membership. The average male

members were 426 and 188 in GPFPOs and (NPFPO), respectively which constitute about 85.81 and 90.20 per cent in the same order. From this, it is clear that female participation in good-performing FPOs was marginally higher than that of NPFPOs. By and large, there was equal proportion of male and female members, though male members dominated the FPO membership.

Table 4.1: General characteristics of the members of selected FPOs in Telangana state

Sl. No.	Particulars	GPFPO		NPFPO	
a.	**Membership detail**	**Nos**	**Per cent**	**Nos**	**Per cent**
1	No. of members	496		208	
2	Male Members	426	85.89	188	90.38
3	Female Members	70	14.11	20	9.62
b.	**Age**				
1	Young (<35)	328	66.33	118	56.73
2	Middle age (>35)	168	33.87	90	44.28
c.	**Literacy**				
1	Literate members	341	68.75	122	58.65

4.1.2 Age: The members of the FPOs are classified into two groups based on the age viz., young members with <35 years of age and middle age with >35 years of age. The average number of young members in GPFPOs was higher by 11 per cent compared to the members of same age in NPFPOs. Probably, this could be the one of the reasons one can attribute for better performance of the FPOs as they are open for the new ideas and amenable to bring in changes and risks.

4.1.3 Education: Literacy levels of the members have an impact on the adoption of new technologies and strategies in the FPO activities. Good-performing FPOs were having higher literacy per cent than the NPFPOs. In the GPFPOs, 68.75 per cent of the members were literates. As against this 58.65 per cent of the members were illiterates in NPFPO. By this, it is visible that literacy has been influencing the performance of the FPOs positively.

4.2 Turnover and operational details:

In this section, the total financial turnover, crop-wise turnover details and operational detail like area of operation and years of operation of the two groups of FPOs are compared and presented in Table 4.2 and the results are discussed in this section

4.2.1 Turnover: The average turnover of the GPFPOs was observed to be six times higher than that of the NPFPOs i.e. ₹ 44,28,571 compared to ₹ 7,38,571. The low average turnover in NPFPOs is mainly due to the less and decreasing business activities. Based on the average turnover of FPOs, the average turnover per member is calculated. The average turnover per member of GPFPOs was ₹ 8,923 while in the case of NPFPOs it was ₹ 3,543. This comparison shows that the average per member turnover was very low in the case of NPFPOs.

Table 4.2: Turnover and Operational details of selected FPOs in Telangana state

Sl. No.	Particulars	GPFPO		NPFPO	
		Turnover (₹)	Per cent share	Turnover	Per cent share
A	**Turnover details**				
1	Average turnover	44,28,571		7,38,571	
2	Average turnover per member	8,923		3,543	
B	**Crops traded**				
1	Nos. of crops traded	7		4	
2	Turnover (Mango crop)	13,28,571	30	2,58,500	35
3	Turnover (Tomato)	11,07,142	25	2,21,571	30
4	Turnover (Papaya)	5,31,428	12	1,40,328	19
C	**Operations details**	**Nos**		**Nos**	
1	Number of years of operation	4.2		2.4	
2	Area coverage (No of villages)	12		7	
D	**Inputs marketed**	No. of FPOs		No. of FPOs	
1	Seeds	7	100	5	71
2	Fertilizers	7	100	6	86
3	Pesticides	6	86	3	43
4	Machinery	3	43	0	0

4.2.2 Crop-wise turnover

The average number of horticultural crops traded in GPFPOs was seven compared to four in NPFPOs. Further, in three selected crops, *viz*., mango, tomato and papaya, the turnover by the GPFPOs was found to be substantially higher than that of NPFPOs. The share of these crops in the total turnover is about 67 per cent for the GPFPOs and 84 per cent for NPFPOs. This is because of the marketing of more crops by GPFPOs than NPFPOs. Lower share per crop in the overall turnover is a positive sign for the good performance of the FPOs. A higher share per crop indicates a high risk of business and limitation of business in fewer crops.

4.2.3 Operational details

A comparison of FPOs years of operations among two interested groups revealed that the average number of years of operation of GPFPOs was 4.2 years while it was only 2.4 years in the case of NPFPOs. Further, the area of operation of GPFPOs was in 12 villages while it was seven villages in NPGPOs. The lower operational area can directly influence the overall performance of the FPOs due to the geographical limitation. These factors indicates that it takes some time for the FPOs for establishment of the company not only to increase the business turnover but also to expand its area of operation. Thus, it can be inferred that performance may improve gradually as the years progress.

4.2.4 Input marketing

FPOs are into input marketing along with output marketing and they provide inputs such as seeds, fertilizers, pesticides, and machinery that are essential for farming. All the GPFPOs were supplying seeds and fertilizers to its members, while 71 and 86 per cent of NPFPOs, supplied seeds and fertilizers, respectively. Nearly 43 per cent of the GPFPOs have started custom hiring centres for agriculture machinery, whereas NPFPOs are yet to get involved in custom hiring of agriculture machinery activities. In the case of pesticides, 86 per cent of GPFPOS supply pesticides to its members while 43 per cent of NPFPOs supply pesticides. Thus it can be concluded that the GPFPOs are supplying most of the agricultural inputs required by its members while it is not so in NPFPOs.

4.3 Marketing practices followed by selected FPOs in Telangana state

Output marketing activities followed by the FPOs have been analysed and presented in this section based on major crops it marketed. The crop-wise marketing practices, costs and returns of marketing of these crops including quantity traded, procurement costs, marketing costs, returns, etc. by the selected GPFPOs and NPFPOs during the output marketing have been collected.

4.3.1 Marketing activities of FPOs in selected horticultural crops

The major horticultural crops handled by the GPFPOs and NPFPOs varied *i.e*. seven and four respectively, three of them, *viz*., mango, tomato and papaya which were common in these two groups and contributed significantly to its overall turnover as discussed in the previous section are selected, and marketing activities of these two groups have been analyzed and the results are discussed in this section.

4.3.1.1 Marketing practices:

Mango : As mango is a seasonal fruit, its marketing is confined to April, May, and June Most of the mango growers in Telangana sold their produce to pre-harvest contractors during the months of January, February. In the case of FPOs, they directly brought harvested mangoes at farm gate. Later on, cleaning and sorting were done in the field itself. Then the fruits were packed in crates to reduce transit losses. After packing, produce from different farmers who have harvested the crop on the same day were collected in a truck and transported to wholesaler/retailers/ export agencies. Certain amount of the quantities was sent to export agencies where the produce was graded again for better quality. Marketing practices of both GPFPOs and NPFPOs were evaluated based on certain activities and marketing practices and presented in Table 4.3

It was found that most of the good post-harvest practices activities were followed by GPFPOs only whereas only some were practiced by NPFPOs. None of the NPFPOs was performing export activities, branding, and processing activities in mango whereas in GPFPOs one of them had done branding, two had done export activities and three of them

had done processing activities. All the seven selected GPFPOs are into cleaning and transportation but only five of the NPFPOs were into cleaning and transportation.

Table 4.3: Marketing activities followed in Mango by selected FPOs in Telangana state

Sl. No.	Post-harvest Activities	GPFPOs		NPFPOs	
		Nos	Per cent	Nos	Per cent
1	Cleaning	7	100	5	71
2	Sorting	6	86	3	43
3	Packing	6	86	6	86
4	Transportation	7	100	5	71
5	Branding	1	14	0	0
6	Processing	3	43	0	0
7	Export activities	2	29	0	0

Tomato: In marketing of tomato by the FPOs, marketing practices followed by them play a major role in reducing marketing cost and realising higher selling price. The results are presented in Table 4.4 and discussed below.

All GPFPOs had done cleaning, sorting, packing and transporting activities in marketing of tomatoes. However in the case of NPFPOs, only three were involved in sorting and transporting, four had done cleaning and five had done packing, which was less than GPFPOs while one of the good performing FPOs was doing processing and packaging, two of the FPOs were involved in exporting. None of the NPFPOs were into export activities, branding and processing. All these directly or indirectly influence the performance of the FPO. After the harvesting of the tomato at the field itself the cleaning, sorting/primary grading were done and then packed into crates. Each crate accommodated a weight of 20kgs. Tomatoes were collected from different farmers who had harvested on the same day to reduce transportation costs and sent to wholesaler/retailers/export agencies. The produce that was sent to export agencies undergoes another grading at the collection centre of the export agency.

Table 4.4: Marketing activities followed in Tomato by selected FPOs in Telangana state

Sl. No.	Activities	GPFPOs		NPFPOs	
		Nos	Per cent	Nos	Per cent
1	Cleaning	7	100	4	57
2	Sorting	7	100	3	43
3	Packaging	7	100	5	71
4	Transport	7	100	3	43
5	Brand name	1	14	0	0
6	Processing	1	14	0	0
7	Export activities	2	29	0	0

Papaya: FPOs collect papaya after the harvest directly from the field and then the cleaning/sorting/packing were done at the place of the harvesting. Most of the time, papaya was wrapped in newspaper grade paper and placed in the boxes and then loaded into a small truck. Some of the FPOs sold directly to the customers in most cases, their produce was directly transported to wholesalers/retailers/export agencies. For export grading was done again by exporting agencies at the collection centre. Here too, as observed in mango and tomato, none of the NPFPOs was involved in exporting, branding and processing but in the case of GPFPOs one was involved in branding and two were involved in exporting (Table 4.5).

While analyzing basic activities like sorting, packaging and transporting except one, all the GPFPOs had done these activities. All the GPFPOs cleaned the papaya whereas six NPFPOs were doing cleaning activities. As we can see GPFPOs were interested in exporting and branding their produce at the same time even though some of the NPFPOs were not involved in basic activities like cleaning and transporting. This type of marketing practices had made the GPFPOs perform better when compared to NPFPOs. All these practices helped the GPFPOs to realize the higher price for their produce.

Table 4.5: Marketing activities followed in Papaya by selected FPOs in Telangana state

Sl. No.	Post-Harvest activities	GPFPOs		NPFPOs	
		Nos	Per cent	Nos	Per cent
1	Cleaning	7	100	5	71
2	Sorting	6	86	3	43
3	Packaging	6	86	5	71
4	Transport	6	86	4	57
5	Processing	0	0	0	0
6	Brand name	1	14	0	0
7	Export activities	2	29	0	0

4.3.1.2 Marketing channels and marketing efficiency of the selected FPOs

Marketing channels through which FPOs have marketed their products are presented in the form of flow diagrams and can be compared easily with each other.

4.3.1.3 Marketing channels adopted by selected GPFPOs in Telangana state

Marketing channels practised by the GPFPOs is illustrated in Fig 2. Most of the produce in these group of FPOs were directly sold to the retailers and Raithu Bazaars Most of the GPFPOs did not involve wholesalers in their channels. Some of the FPOs even sold directly to the final customers through google forms, social media, home deliveries, etc. This also led to a reduction in the average marketing cost incurred by GPFPOs which was ₹ 314/q in mango, ₹ 371/q in tomato, ₹ 392/q and in papaya which was quite less when compared to NPFPOs. This was made possible due to effective marketing channels adopted by GPFPOs.

4.3.1.4 Marketing channels adopted by selected NPFPOs in Telangana state

Marketing channels adopted by the NPFPOs in marketing of their produce in depicted in Fig 3. Majority of them market through wholesalers where FPOs got low prices

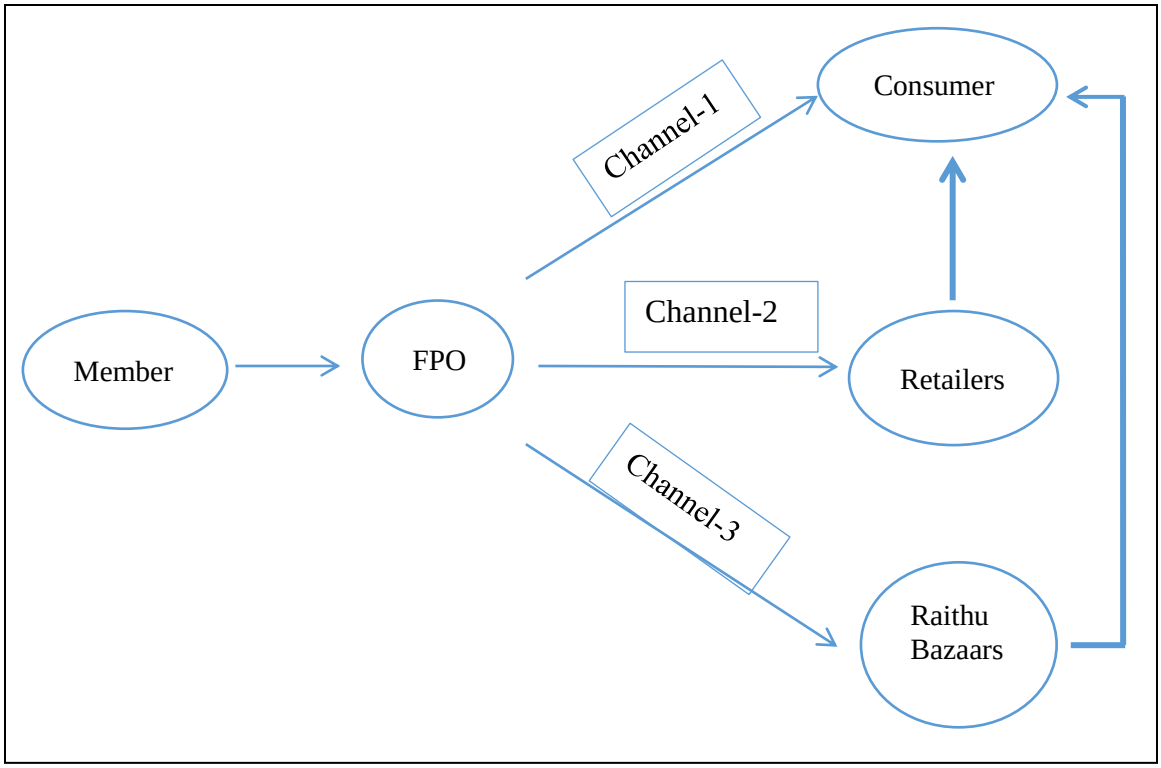

Fig. 2: Marketing channels adopted by selected GPFPOs in Telangana state

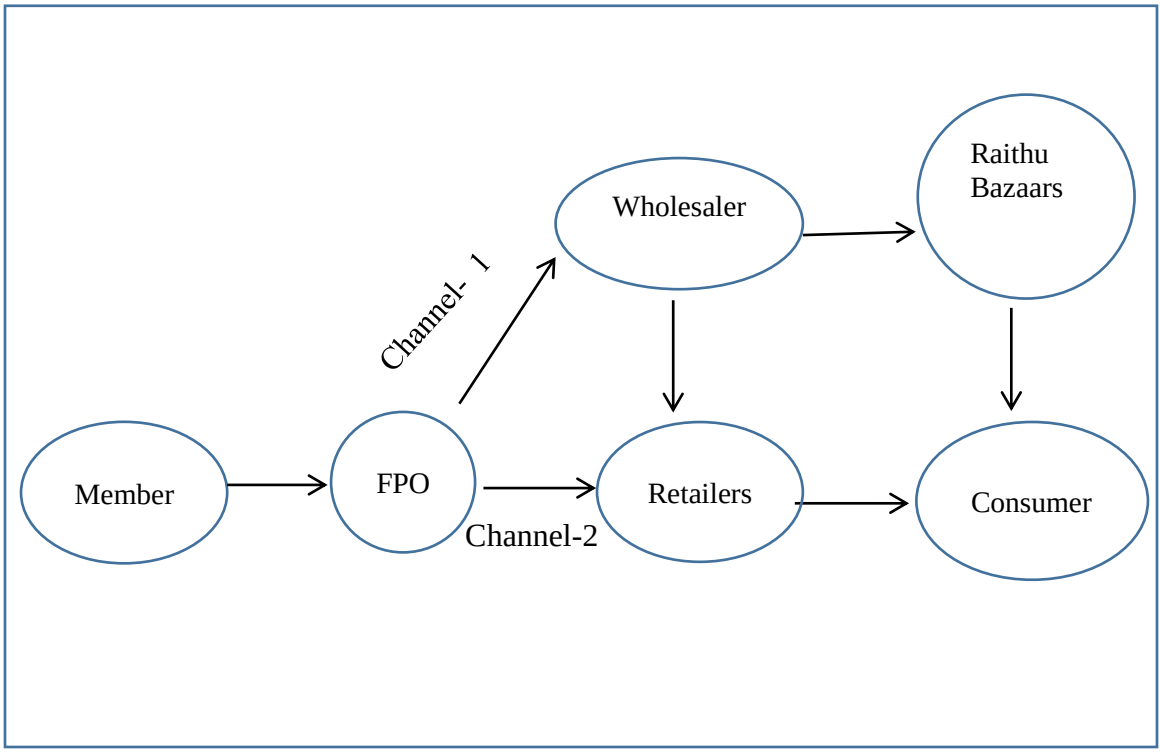

Fig. 3: Marketing channels adopted by selected NPFPOs in Telangana state

when compared to GPFPOs. Few of the NPFPOs did not involve wholesalers in their channels. As the NPFPOs could not promise regular availability of the product to the retailers they have to sell the produce comparatively at a low cost to the wholesaler. In the case of the NPFPOs not even a single FPO sold directly to the final customers. This also led to an increase in the marketing cost. The average marketing incurred by NPFPOs is ₹ 371/q in tomato, ₹ 457/q in papaya and ₹ 355/q in mango, which was quite high when compared to GPFPOs. This is due to increased marketing agents in the channels.

4.4 Marketing costs and margins in the marketing of selected fruits and vegetables in Telangana state

4.4.1 Mango

The costs incurred in marketing of mango in 2020-21 is presented in Table 4.6, It has been found that prices offered to the member of the GPFPOs are higher than NPFPOs. The average farmer price offered by GPFPOs was found to be nearly ₹ 1200/q of mango marketed. The GPFPOs were able to offer higher price to the farmers only because they could sell their produce at a much higher price compared to NPFPOs. GPFPOs sold the produce at an average price of ₹ 6235/ q which is ₹1,450.7/q higher than the price of NPFPOs. GPFPOs were able to sell their produce at higher prices because of their quality produce and better market linkages like selling to export agents and well-established retailers like retail chain outlets. GPFPOs managed to sell their products with lower marketing costs like labour charges and transportation costs. Labour charges borne by NPFPOs are high, because of less availability of work from the FPOs and the occasional demand for labour by the FPOs. Regular hiring of labour can reduce the average labour charges incurred by FPOs, As the quantity traded and the number of commodities was very low in NPFPOs, labour charges and transportation charges were high. This had direct impact on marketing costs and also resulted in low margin for the FPOs. GPFPOs earned a margin of around ₹815/q of mango marketed, whereas only ₹559/q in the case of NPFPOs. GPFPOs managed to sell their produce at high prices due to better marketing channels and post-harvest activities.

Table 4.6: Costs and margins in marketing of mango by selected FPOs in Telangana state

Sl. No.	Parameters	GPFPOs	NPFPOs
		Rs/q	Rs/q
1.	Farmer price	5,106.20	3,869.40
2.	Labour charges	94.03	117.02
3.	Transportation charges	220.26	238.81
4.	Margin	815.61	559.97
5.	Selling Price	6,235.90	4,785.20

4.4.2 Tomato

The costs and margin of marketing of tomatoes is presented in Table 4.7. It can be observed that the farmer prices in the GPFPOs were higher than in NPFPOs even in the case of tomatoes. The average farmer price offered by the GPFPOs was found to be nearly ₹ 2,084/q of tomato marketed. GPFPOs offered higher prices to farmers because they could sell their produce at much more prices compared to NPFPOs. GPFPOs sold the tomato at an average price of ₹2,772/q which was higher than the NPFPOs that is ₹2256. GPFPOs sold their produce with low marketing costs like labour charges and transportation costs.

Table 4.7: Costs and margins in marketing of Tomato by selected FPOs in Telangana state

Sl. No.	Parameters	GPFPOs	NPFPOs
		Rs/q	Rs/q
1.	Farmer Price	2,084.50	1,627.80
2.	Labour charges	88.32	104.07
3.	Transportation charges	283.85	313.15
4.	Margin	315.43	251.38
5.	Selling Price	2,772.10	2,256.40

Marketing costs were high and margins were low for NPFPOs. GPFPOs earned a margin of around ₹315/q of tomato marketed, whereas only ₹251/q in the case of NPFPOs. FPOs procured at the field level just after the harvesting of tomatoes. Tomatoes are then cleaned and sorted according to colour and size at the field itself, and then to reduce the transportation losses these tomatoes were packed in-tray. Only some quantities of tomatoes are transported with the help of own/hired small commercial vehicles to the retailers/export agents etc. These quantities are made by collecting from different farmers to reduce transportation costs and avoid storage costs. Transportation was done every day or on alternate days during the season.

4.4.3 Papaya

While marketing of Papaya in the year 2020-21, members in the GPFPOs realized higher prices than members of NPFPOs as in the table 4.8. The average farmer price offered by the GPFPOS was nearly ₹ 2,474 per quintal of papaya marketed. The GPFPOs offered higher prices because they could sell better products at a better place when compared to NPFPOs. GPFPOs sold the papaya at an average price of ₹3,879/q which was higher than the NPFPOs. Even in the case of papaya too, GPFPOs sold their produce with low marketing costs like labour charges and transportation costs same as in crops like mango and tomato. The higher marketing costs and also very low margins were noticed in the case of NPFPOs. GPFPOs earned a margin of around ₹1003/q of papaya marketed, whereas it was only ₹766/q in the case of NPFPOs.

Table 4.8: Costs and margins in marketing of Papaya by selected FPOs in Telangana state

Sl. No.	Parameters	GPFPOs	NPFPOs
		Rs/q	Rs/q
1.	Farmer Price	2,474.80	2,184.50
2.	Labour charges	90.18	109.38
3.	Transportation charges	302.64	348.81
4.	Margin	1003.08	766.91
5.	Selling Price	3,870.70	3,409.60

4.5 Comparison of marketing efficiency of the selected FPOs

Marketing efficiencies were being calculated for both groups of the FPOs by two methods they are Shepherd's method and the Acharya method. These figures clearly show the difference in their efficiencies while marketing their produce.

4.5.1 Marketing efficiencies of selected FPOs in Telangana state

Marketing efficiencies are being calculated for both GPFPOs and NPFPOs and the findings are presented in Table 4.10. From those figures, we can clearly understand that marketing efficiencies of the GPFPOs are higher than that of NPFPOs. The marketing efficiencies of the good performing group was 2.92 whereas 2.24 for NPFPOs in Shepherd's method. Though marketing efficiencies are higher in both groups, still there was scope to reduce the marketing costs of NPFPOs so that members of these companies could realise higher returns to their produce. Average producer share in consumer rupee of the GPFPOs has been observed that 0.65 whereas only 0.54 in NPFPOs.

Table 4.9: Marketing efficiencies of selected FPOs in Telangana state

Sl. No.	Marketing Efficiency	GPFPOs	NPFPOs
1	Shepherd's	2.92	2.24
2	Acharya	1.92	1.23

4.6 Financial analysis of selected group of FPOs

In this section financial status of the FPOs was evaluated based on the liquidity ratios and capital structure ratios. Liquidity ratios like the current ratio and acid test ratio were calculated and their averages were compared for both good performing and NPFPOs. Capital structure ratios like debt equity ratio, debt asset ratio and net capital ratio are estimated along with averages for both groups.

4.6.1 Liquidity Ratios

The liquidity ratio of both the GPFPOs and NPFPOs are estimated and averages are compared for a better understanding. Liquidity ratios like current ratio and acid test

ratios were estimated. The current ratio measures the degree of short term liquidity of the FPOs, Current ratio of GPFPOs was 1.64 and only 0.76 for NPFPOs. The Current ratio of 1.64 indicates that GPFPOs are in the position to meet their current obligations. An average current ratio was 0.76 for NPFPOs which warns that their current assets can't meet their current liabilities which are quite risky. In GPFPOs current ratio ranged between 1.5 to 2 and in NPFPOs it is 0.5 to 1 which is an indication that current assets of NPFPOs can't meet their short term requirements.

Table 4.10: Liquidity Ratios of selected FPOs in Telangana state

Sl. No.	Liquidity Ratio	GPFPOs	NPFPOs
1	Current Ratio	1.64	0.76
2	Acid Test Ratio	1.41	0.40

The acid test ratio represents the ratio between quick assets and current liabilities. Quick assets are calculated by deducting inventories from total assets. Average Acid Test Ratios of good performing FPOs are 1.41 and 0.40 for non-performing. Ratios found to be greater than one indicating that GPFPOs possess enough cash to pay their immediate liabilities, such as short term debts. NPFPOs have an average acid test ratio of 0.40 which indicates that FPOs doesn't have enough cash to repay their immediate liabilities which is not encouraged for better long term development of the FPOs.

4.6.2 Capital structure ratios

Capital structure ratios like debt equity ratio, debt asset ratio and net capital ratio are estimated along with averages for both good performing and NPFPOs. The average debt-equity ratio of GPFPOs is 1.19 and 2.46 in non-performing FPO. A ratio of 1.19 in good performing FPOs indicated less debt and reduced risk compared to the other FPOs. The high average debt-equity ratio in NPFPOs indicates more debt and high risk in operations. GPFPOs were financially healthy but were unwilling to take risks showing conservative management. In GPFPOs Debt equity ratio ranged 1 to 2 and in NPFPOs it was 2 to 3 which is due to higher debt and lower net worth.

Table 4.11: Capital structure ratios of selected FPOs in Telangana state

Sl. No.	Capital Structure Ratio	GPFPOs	NPFPOs
1	Debt Equity ratio	1.19	2.46
2	Debt Asset ratio	0.54	0.71
3	Net Capital ratio	1.88	1.42

In general debt-asset ratio is a measure of FPO's financial risk and it measures how much of an FPO's debts can be paid off by selling its assets in case of liquidation. The average debt asset ratio of GPFPOs was 0.54 and 0.71 in NPFPOs. This ratio says that debts of GPFPOs could easily be paid off by selling its assets when compared to non-performing.

The Average net capital ratios of both GPFPOs and NPFPOs were found to be greater than one indicating a high degree of liquidity in the long run and a high degree of availability of assets to pay off the debts in the long run. When average net capital ratios of both GPFPOs and NPFPOs are considered, GPFPOs possessed high degree of liquidity than the non-performing group.

4.7 Problems faced by the selected FPOs in Telangana state

The most common problems faced by the FPOs are listed and given a ranking based on the Garret's ranking. These ranks are calculated from the scores given by the good performing and NPFPOs. It has been found that the lack of knowledge about exporting fruits and vegetables and the lack of processing units for fruits and vegetables were the major problems faced by the GPFPOs. Wherein NPFPOs lack collective efforts in marketing, lack of awareness about the concept of FPOs among the members was the major problems. By this, it was known that GPFPOs had overcome the initial problems like awareness among the members of FPOs and now these FPOs were looking forward to the export and processing activities in the coming future.

Table 4.12: Problems faced by the selected FPOs in Telangana state

Sl. No.	Name of the Problem	GPFPOs		NPFPOs	
		Average weighted Score	Rank	Average weighted Score	Rank
1	Knowledge about exporting of fruits and vegetables	4.00	I	2.29	IX
2	Processing units for fruits and vegetables	3.86	II	2.57	V
3	Storage for fruits and vegetables	3.43	III	1.86	X
4	Adequate price in fruits and vegetables	3.29	IV	3.29	III
5	Availability of modern infrastructure facility	2.86	V	2.43	VIII
6	Lack of collective efforts in marketing	2.43	VI	3.86	I
7	Access to market information and markets	2.43	VI	2.57	V
8	Lack of assured quality in fruits and vegetables	2.14	VIII	2.86	IV
9	Proper transportation during peak season	1.86	IX	2.57	V
10	Awareness about the concept of FPOs among the members	1.71	X	3.71	II

4.8 Documentation of success story of a good performing FPO

The concept of success stories is prevalent; it is mentioned as an activity with the biggest impact and a key contributor to successful deployment efforts. A case study or success story creates visibility, credibility and clarity around the value and application of change management. It is important that we take time to capture success of the FPO which is an inspiration for the new FPOs and other non-performing FPOs. Sharing achievements will put the facts and ways for the path of success. Advantage to the policymakers and other stakeholders.

PLATE 1: Interaction with FPO (Adarsha Enabavi FPCL)

4.8.1 Aadharsa Enabavi Farmers Producer Company Limited

Aadharsa Enabavi FPCL. is a limited company by shares and private offering activities Agriculture and related service activities as its principal business activity. With a current active status, and a corporate identification number U01500TG2018PTC129007 and a registration number 129007, its registered address is 2/12 Kallem Village, Lingala Ghanapur Mandal,Warangal TG 506201 IN. The directors of the company are Radhika Basvagani, Raghavareddy Thipireddy, Mabbu Laxmi, Vijay Kumar Gandi and Venkataiah Mylaram. Its authorized share capital is Rs. 5,00,000 and its paid-up capital is 1,000. Primary email address to contact is adharsaenabavifpo@yandex.com.

Aadharsa Enabavi FPCL. has been engaged in facilitating supply of agricultural inputs to its member farmers and has distributed seeds of vegetables and fruits. It also supplied organic fertilizer, manures and bio pesticides. NABARD and (Center for Sustainable Agriculture) CSA jointly supporting this FPO with this support FPO managed to start custom hiring centres Which brings steady income to the FPO.

FPO has introduced 20 varieties of fruits and vegetables in one acre land. FPO has taken immense efforts in turning all the member farmers into organic cultivation. FPO is providing cleaning, grading, sorting, packaging, processing, transportation of the procured fruits and vegetables to the collection center also. Adarsha Enabavi FPCL. has formed farmer interest groups which helped in knowledge sharing and group meetings. Member farmers are being linked to KVK which in turn help farmers to adopt improved farming practices. Initially, FPO used to procure fruits and vegetables from the member farmers and sold them in the Raithu Baazars. Later FPO has extended their marketing channels and exported their produce to Singapore. They have established a collection centre in Hyderabad along with a group of FPOs and some wholesalers. FPO on an average exported 22 tons of fruits and vegetables per annum to Singapore, transportation from India is provided by the Singapore based agent only. Export is mostly done through seaways but in some cases it is carried out by the air.

FPO is now becoming a tutor for the neighbouring FPOs in teaching new technologies and facilitating direct marketing activities. Aadharsa Enabavi is selling some

of its procured fruits and vegetables directly to the customers. Direct retailing is done through the google forms and WhatsApp groups' home delivery is also provided by the FPO itself through the delivery agents. FPO has earned a good profit in these years and extended their business FPO also brought two acres of land and started cultivating in this land. Currently FPO has become an advisor for the other FPOs, these type of FPOs has to be identified and share their business journey with other FPO that may help the upcoming FPOs in establishing themselves in the business.

SUMMARY AND CONCLUSION

CHAPTER V
SUMMARY AND CONCLUSIONS

The problems faced by small farmers in India are multifaceted. They produce fruits and vegetables in rural areas, but they are in great demand and prices are high in urban areas. To get more income, farmers need to sell their products in cities. But unfortunately, rural India lacks transportation and storage facilities that could help farmers in storing perishable goods for longer periods. Due to a lack of storage and processing facilities, more than 30 per cent of fruits and vegetables and 15 per cent of grains are getting wasted (FAO 2011).

The growing number of studies has shown that if small farmers participate in the market, they can substantially increase income from agriculture and allied activities. Therefore, the focus of development has shifted from increased production to market connectivity. One of the possible alternatives to effective marketing is to mobilize farmers to take collective action and arrange inputs and collective marketing to benefit from economies of scale. With this perception, it is necessary to mobilize farmers for joining Farmers Producer Organisations (FPOs) for collective activities.

The present study was proposed to examine the performance of some of these FPOs with the following specific objectives.

1. To examine the practices and efficiencies of FPOs in marketing of selected fruits and vegetables in Telangana state
2. To study the business performance of selected fruit and vegetable based FPOs in Telangana state
3. To document the success stories and problems of horticultural based FPOs

Methodology

For evaluating the objectives of the study, the required data were collected through personal interview method with the help of pre-tested schedule. The primary data with respect to general characteristics, costs and margins of marketing channel selected

commodities of traded by FPOs, sales of produce, price received, marketing costs, procurement procedure, the problems involved were collected from FPOs. Seven FPOs each from group of Good performing FPOs (GPFPOs) and Non-performing FPOs (NPFPOs) were selected randomly from the list derived earlier.

Calculation of marketing efficiencies to know the better marketing practices. Marketing efficiencies were calculated through two methods shepherd's method and the Acharya approach. Later on, Average marketing efficiency has been calculated for both better performing and non-performing FPOs and compared to each other for a clear understanding. The FPOs were asked to rank the problems faced while running the FPOs. By reference to Garrett's chart, the ranks were afterwards transformed into scores. Garrett's ranking approach was utilised in the study to examine the problems faced by good performing and better performing FPOs.

Salient findings:

1. It is observed that the average number of members in GPFPOs was 130 per cent higher than the NPFPO and these numbers were 496 and 208 in GPFPOs and (NPFPO), respectively. The average number of females in GPFPOs is 70 which constitute 14.19 per cent of total membership, whereas only 20 members in NPFPOs were female members which were 9.80 per cent of the membership. It indicates that higher female participation had a positive impact on the working of the FPOs.

2. The average number of young members GPFPOs was higher by 11 per cent compared to the same age in NPFPOs. Good-performing FPOs were having higher literacy per cent than the NPFPOs. In the GPFPOs, 68.68 per cent of the members were literates. As against this in NPFPOs 58.40 per cent of the members were illiterates. It can concluded that the presence young and illiterate members had a positive impact on the working of the FPOs.

3. The average turnover of the GPFPOs was observed to be six times higher than that of the NPFPOs i.e. ₹ 44,28,571 compared to ₹ 7,38,571. The share of these crops

in the total turnover was about 67 per cent for the GPFPOs and 84 per cent for NPFPOs. Marketing of the more number of crops improved profitability.

4. All the GPFPOs supplied seeds and fertilizers to its members, while in 71 and 86 per cent of NPFPOs, supplied seeds and fertilizers, respectively. Nearly 43 per cent of the GPFPOs started custom hiring centers for agriculture machinery, whereas NPFPOs were yet to get involved in custom hiring of agriculture machinery activities. In the case of pesticides input, 86 per cent of GPFPOS supplied pesticides to its members while 43 per cent of NPFPOs supplied pesticides. Supply of other inputs had helped the good performing FPOs.

5. Most of the produce from GPFPOs was directly sold to the retailers and Raithu Bazar and they did not involve wholesalers in their channels. Some of the FPOs even sold directly to the final customers through google forms, social media, home deliveries etc. Direct selling of produce led to increase in the FPOs margin of profit and higher marketing efficiency.

6. In mango, the average farmer price offered by GPFPOs was found to be nearly ₹ 1200/qtl. GPFPOs sold the produce at an average price of ₹ 6235/qtl which is ₹1,450.7/qtl higher than the NPFPOs. GPFPOs earned a margin of around ₹815/q of mango marketed, whereas only ₹559/q in the case of NPFPOs. GPFPOs managed to sell their produce at higher due to better marketing channels and post-harvest activities.

7. In tomato, the average farmer price offered by the GPFPOs was found to be nearly ₹ 2,084/q of tomato marketed. GPFPOs sold the Tomato at an average price of ₹2,772/q which is higher than the NPFPOs. GPFPOs earned a margin of around ₹315/q of tomato marketed, whereas only ₹251/q in the case of NPFPOs.

8. In papaya, the average farmer price offered by the GPFPOs was nearly ₹ 2,474 for every one quintal of papaya marketed. GPFPOs sold the Papaya at an average price of ₹3,879/q which is higher than the NPFPOs. GPFPOs earned a margin of around ₹1003/q of papaya marketed, whereas only ₹766/q in the case of NPFPOs.

9. The average marketing efficiency of the GPFPOs was 2.92 whereas 2.24 for NPFPOs in the shepherd's method. Better Marketing Efficiencies was due to lesser price spread in GPFPOs.

10. The current ratio measures the degree of short term liquidity of the FPOs, Average Current Ratio of GPFPOs is 1.64 and only 0.76 for NPFPOs. An average current ratio of 1.64 indicates that GPFPOs are in the position to meet their current obligations. An average current ratio of 0.76 for NPFPOs warns that their current assets can't meet their current liabilities which are quite risky.

11. Average acid test ratios of good performing ratios are 1.41 and 0.40 for non-performing. Ratios found to be greater than 1 indicated that GPFPOs had enough cash to pay their immediate liabilities, such as short term debts. NPFPOs had an average acid test ratio of 0.40 which indicated that FPOs did not have enough cash to repay their immediate liabilities which was not encouraging for better/long term development of the FPOs.

12. The average debt-equity ratio of GPFPOs was 1.19 and 2.46 in NPFPO. 1.19 ratio in good performance indicated less debt and reduced risk compared to other FPOs. The average debt-equity ratios in NPFPOs indicate more debt and high risk in their operations. GPFPOs were financially healthy but were unwilling to take risks showing conservative management.

13. The average debt asset ratio of GPFPOs was 0.54 and 0.71 in non-performing. This ratio says that debts of the good performing can easily be paid off by selling its assets when compared to non-performing.

14. It has been found that the lack of knowledge about exporting fruits and vegetables and the lack of processing units for fruits and vegetables were the major problems faced by the GPFPOs. In NPFPOs lack of collective efforts in marketing and lack of awareness about the concept of FPOs among the members were the major problems. By this, it is known that GPFPOs had overcome the initial problems like

awareness among the members of FPOs and now these FPOs were looking forward to the export and processing activities in the coming future.

Implications of the study

Based on the results of the present study, the following suggestions and policy recommendation were submitted.

1. Desired social parameters like younger age, better education and gender participation seems to influence the performance of the FPOs and hence, it is suggested that these parameter needs to be given priorities for making membership as well including them in the management decision making bodies of the FPOs. The handholding and concerned authorities should also encourage FPOs to involve them during formulation stage of FPO itself.

2. Direct marketing of the produce by avoiding wholesalers and retailers was one of the indicators of success in GPFPOs and hence, some kind of online platforms has to be made available for FPOs to sell their produce directly to customers.

3. Diversifying the crop portfolio with more number of crops and providing equitable importance for the crops as seen in the GPFPO would minimize the risk of marketing and hence, this strategy was to be suggested for all FPOs.

4. The success of the FPO also equally depends on meeting the requirements of the inputs of the members and this was clearly illustrated in the study. Hence, input marketing shall be accorded and similar priorities and importance should be given to output marketing for better performance.

REFERENCES

CHAPTER VI

REFERENCES

ADRIAN J L AND GREEN T W., 2001. Agricultural cooperative managers and the business environment. *J. Agribus.* **19**(1): 17-34.

AMITHA, C. D., SAVITHA, B., RANI, V. S., 2021, Farmer producer organizations (FPOs) – Analysis of profile of FPOs and its members in medak district of Telangana. *Current Journal of Applied Science and Technology*, ***40***(11): 24-31.

ANIKA, T AND MARKUS, H., 2012. Farmers producer companies in India: A new concept for collective action. *Env. Plng*. **44**(2): 411-427.

ANIKA, T., 2014. Linking small farmers to modern retail through producer organizations – Experiences with producer companies in India. *Food Policy.* **45**(1): 35-44.

ARUN KUMAR, T. D., 2004. Profile of SHGs and their contribution for livestock development in Karnataka. *M.Sc. (Agri.) Thesis.* Univ. Agric. Sci., Dharwad.

BABALOLA, A., 2014. Corporate governance and cooperative societies - A survey of tertiary institutions in Oyo, Nigeria. *Dev. Country Stud.* **4**(12): 8-18.

BARHAM, J AND CHITEMI, C. 2009. Collective action initiatives to improve marketing performance: Lessons from farmer groups in Tanzania. *Food Policy.* **34**(1): 53-59.

BEBBINGTON, A. J., MERRILL-SANDS, D AND FARRINGTON, J., 1994. Farmer and community organisations in agricultural research and extension: functions, impacts, and questions. *Agric. Admin. Net.* **1**(47): 1-32.

BHARATHI, R. A., 2005. Assessment of entrepreneurial activities promoted under NATP on empowerment of women in agriculture. *M.Sc. (Agri.) Thesis.* Univ. Agric. Sci., Dharwad.

BHATIA, M. S., 1991. Economic constraints in increasing pulses production. *Agric. Situation in India.* **46**(4): 279-284.

BIJMAN, J., 2002. Essays on Agricultural Co-operatives; Governance structure in fruit and vegetable chains. *Ph. D. thesis*, Erasmus University, Rotterdam.

BINGEN, J., SERRANO, A. AND HOWARD, J., 2003. Linking farmers to markets: Different approaches to human capital development. *Food Policy.* **28**(4): 405–419.

Chamala, S. and Mortiss, P.D., 1990. Working together for land care. *Australian Academic Press.* 13-38.

CHANDARGI, D. M., 2007. A comparative analysis of successful and unsuccessful self-help groups in Gadag district of Karanataka. *M.Sc. (Agri.) Thesis.* Univ. Agric. Sci., Dharwad.

CHAUHAN S., 2015. Producer companies in Madhya Pradesh: An evaluative study. *Int. J. Recent Res. Asp.* **2**(3): 66-77.

CHOPADE., S.L., KAPSE, P. S., AND DHULGAND V. G., 2019,constraints faced by the members of Farmer producer company. *International Journal of Current Microbiology and Applied Sciences,* **8**(8): 2358-2361.

DHAKAL, S., 2013. Seed producer organization of farmer an experience of western terai, Nepal. *Agron. J. Nepal.* **3**(1): 1-12.

ELISABETH, F. AND MATIN, Q., 2011. Linking smallholders to markets: Determinants and impacts of farmer collective action in Kenya. *World Development*. **40**(6): 1255-1268.

ESHAM M., 2007. Evaluating the performance of farmer companies in Sri Lanka: A case study of ridi bendi ela farmer company. *J. Agric. Sci.* **3**(2): 105-132

EVENGY, L AND THOMAS, B., 2016. Networks of rural producer organizations in Uganda: What can be done to make them work better. *World Development.* **78**(1): 572-586.

FAO, 2006. Working paper on promoting farmer entrepreneurship through producer organisations in central and eastern Europe. Retrieved from http://www.fao.org/3/a0847e/a0847e00.pdf

FAO. 2013. Statistical year book of the Food and Agricultural organisation for the United Nations. Retrieved from http://www.fao.org/3/i3107e/i3107e.pdf

GENTZOGLANIS A., 1997. Economic and financial performance of cooperatives and investment owned firms: An empirical study. *J. Agribus.* 171-182.

GRA, J. LEIGHTON, L AND OESCHSLE, S., 1989. Profiles of farmers organisations in Saint Lucia. *IICA-PM A1/LC No.89-001*. **0534**(5391): 1-125.

GUNDLACH, 2013. Theory of constraints. *Int. Bus. Rev*. **22**(2013): 156– 173.

HARDESTY S D AND SALGIA V D., 2004. Comparative financial performance of agricultural cooperatives and investor-owned firms. *Res. Agric. Appl. Econ.* **1262**(2016): 101-837.

HELLIN, J., MARK, L AND MADELON, M. 2008. Farmer organization, collective action and market access in Meso-America. *Food Policy.* **34**(1): 16- 22.

JOSHI, S.K., CHOUDHARY, V.K., 2018, Performance of Farmer Producer Organisations (FPOs) in different regions of Chhattisgarh State: A Case study. *Ind. Jn. of Agri. Econ.*, **3**(73): 399-406.

KALE N K, TILEKAR S N, BORUDE S G AND HINGE B J., 2000. An economic enquiry in to working of dairy cooperatives in coastal area of Maharashtra. *Indian Coop. Rev.* **38**(4): 426-433.

KULANDAISWAMY V AND MURUGESAN P., 2004. Performance of PACS- an empirical evaluation. *Indian Coop. Rev.* **42** (2): 121-130.

LAL, S. AND BRAHM PRAKASH, 1996, Economic constraints on pulse production. *Yojana.* **40**(3): 31-36.

MITTAL, S., 2007. Strengthening backward and forward linkages in horticulture: Some successful initiatives. *Agric. Econ. Res. Rev.* **20**(1): 457-469.

MOHANAKUMARA, V., BASAVARAJ HULAGUR, PRAKASH S. TAMAGOND AND RUDRAPPA, C. ELALLI, 2016. Adoption of post-harvest management practices in pigeon pea crop for sustainable income. *Int. J. Sci. Nat*. **7**(3): 492-495.

MOUSTIER, P., TAM, P. T. G., AND, D. T., BANH, V. T AND LOC, N. T. T. 2009. The role of farmer organizations in supplying super markets with quality food in Vietnam. *Food policy*. **35**(1): 69-78.

MURRAY, E. V., 2009. Linking farmers producing rainfed crops with markets: A new paradigm. *Indian J. Agric. Mktg.* **23**(3): 168-178.

NATIONAL RESOURCE CENTRE FOR RURAL LIVELIHOODS, 2007. Producer companies linking small producers to markets. *Workshop report by Pradan*. New Delhi.

NAVANEETHAM, B., MAHENDRAN, K., AND SIVAKUMAR, S.D., 2019. Analysis of constraints for performance improvement of FPCs in Tamil Nadu. *Int J of Farm Sci*, **9**(2): 12-18.

NIRGUDE, R.R., SATPUTE, S.V., KAMBLE, B.H., CHOUDHARI, S.A. AND YADAV, D.B., 2020, Economic analysis of farmer-producer–organization (FPO): A case study of Abhinav farmers group, Narayangaon, Pune. *Int. J. Chem. Stud.,* **8**(1): 2499-2502.

PANDA, C. K AND SINGH, S. R., 2016. Role of extension in leveraging FPO's for marginal farmers. *Int. J. Farm Sci.* **6**(1): 243-254.

PARLIAMENT C, LERMAN Z AND FULTON J R., 1990. Performance of cooperatives and investor-owned firms in the dairy industry. *J. Agric. Coop.* **5**(1): 1141-2016.

PATIL, S. A., TALATHI, J. M., WADKAR, S. S AND KHOBARKAR, V. K. 2007. Price spread in marketing of capsicum in Thane district of Maharashtra state. *Agric. Mktg.* **12**(3): 42-47.

PUJARI A A, SUHAG K S AND MALIK D P., 2009. An evaluation of performance of primary agricultural cooperative societies in Karnataka State. *Indian Coop. Rev.* **46**(4): 275-285.

RAGHUPRASAD, K. P., UMAMAHESH, A. B AND MOHAN I. N. 2004. Self Help Groups: strengths and constraints in introducing agro based enterprises. *M.Sc. (Agri.) Thesis.* Univ. agric. Sci., Dharwad.

RAJPUT, H. K., DESHMUKH, A. N., MOKHALE, S. U AND SALI, J. R., 2016. Technological gap in red gram cultivation. *Agric. Update.* **11**(3): 255-257.

RONDOT, PIERRE AND COLLION, M. H., 1999. Agricultural producer organizations: Their contribution to rural capacity building and poverty reduction. *CIRAD.* **1**(30): 1-80.

SAUTIER, D AND BIENABE, E., 2005. Role of small scale producer organizations to address market access. *Proc. Int. Sem*. Westminster, London (UK).

SHIVANI, V., RAMANDEEP, S AND SIDHU, M. S., 2017. A case study on selected farmer producer organization for promoting processed food in Punjab. *Indian J. Agric. Mktg.* **31**(1): 15-23.

SINGH, D. K. AND MOHILEY, R. A. G., 1995. A comparative analysis of costs and margins for different channels in marketing of arhar. *Indian J. Agric. Mktg.* **3**(2): 70-71.

SNEHALATHA, M AND REDDY, M. N., 1998. Impact of thrift and credit groups in Income generation of rural women. *J. Extn. Edu.* **9**(2): 2031-2032.

SRIVASTAVA, G. C., SINGH, U. P AND RIZVI, S. S. H., 1989. Pulses production technology adoption and constraints in Bihar. *Agric. Situation in India.* **43**(8): 641-646.

STOCKBRIDGE, M., DORWARD, A AND J. KYDD., 2003. Farmers' organisations for market access: Learning from success. SDC briefing paper. *Swiss Development Corporation: Bern.*1-42.

SUBBARAO, K., 1978. Rice price behaviour and public procurement: an analysis of the experience of Andhra Pradesh. *Indian J. Agric. Econ.*, **33**(902): 1-20.

SZABO, G. G. 2009. Successful producer owned marketing organisations in a transition country: Two case studies from Hungarian agribusiness. *Paper prepared for presentation at the 113th EAAE seminar*. **698**(2016).

TACSA Report on Secondary Agriculture, 2013. Secondary agriculture: value addition to primary agriculture. Retrieved from http://pbplanning.gov.in/pdf/TACSA REPORT.pdf

TISS., 2005. Causes of farmer suicides in Maharashtra: An enquiry. *Report to the Mumbai High Court.* Tata Institute of Social Sciences, TISS Rural Campus, Osmanabad: 47.

VIGNESH, G., 2019, Role of actors in farmer producer organization (FPO) based millet value chain. *Madras Agric. J.*, **106**(1-3): 1.

APPENDICES

University of Agricultural Sciences, Bangalore
Directorate of Post Graduate Studies
Department of Agricultural Marketing, Co-operation and Business Management, GKVK, Bengaluru-65

Date: …./…./2021

Title: Marketing and Business Analysis of Horticulture based Farmer Producer Organisations in Telangana state

Objectives:

1. To examine the practices and efficiencies of FPOs in marketing of selected fruits and vegetables.
2. To study the business performance of selected fruit and vegetable based FPOs in Telangana state.
3. To document the success stories and problems of horticultural based FPOs.

FPO Details:

1. Organizational background :
   a) Date of registration of FPO: _____
   b) Established by/ promoted by: _____
   c) Authorized share capital (Rs. Lakh): _____
   d) Paid up capital (Rs. Lakh): _____
   e) Type of share holder

Type of share holder	Individual	Group
At the time of registration		
Current		

2. Source of capital
   a) Number of shareholders/ members _____
   b) Sources of Finance to FPO
      i. Bank ____ NGO _____ Private org. _____ Any other_____
   c) Sources of working capital:
      i. Own funds ____ Profits ____ Grants ____ Loan ____ Others___

Marketing Aspects:

1. Linkages with input suppliers:
    a) Seeds:
    b) Fertilizers:
    c) Pesticides:
    d) Machinery and Equipment's:
    e) Others (please mention if any)

2. Is FPO Facilitating any contract farming activities,
   If yes, what are the firms involved the agreement…..

3. Is FPO performing any pre-market actions:

Cleaning	Grading	Sorting	Packaging	Processing	Transport	Any other

4. Infrastructure facility available in FPO and its capacity

Warehouse		Grading unit		Packing unit		Processing unit		Any other	
No.	capacity	No.	Capacity	No.	Capacity	No.	Capacity	No.	Capacity

5. Is FPO following market-led production practices? If yes in what way
    a. Change in time of production ……..
    b. Improved Production practices ……..
    c. Production of market demand varieties ……...
    d. Quality improvement……..
    e. Value addition …….
    f. Any other ……..

6. How does FPO access market information?
    a) Personal visits to markets …….
    b) Telephone or mobile contact with Traders/Retail buyers …….
    c) Through web portals ……
    d) Through NGOs ……
    e) Any other ……

7. Does the FPO Export produce to other countries? If Yes
    a) What are the fruits exported……
    b) What are the vegetables exported……
    c) To which countries export is done……
    d) What is the Mode of transportation for the export of produce…..

8. Is FPOs able to provide better prices for the farmers during the sale? If yes
    a) What percent higher prices are offered when compared to local market prices…..

9. Whether your FPO is associated with SHG /Co-op. Yes/No,
    If yes, provide details _____

10. Whether the FPO is marketing processed fruits and vegetables? Yes/No,
    If yes, what is the brand name……..

11. FPO has established network with market players:

Commission agent	Wholesaler	Processor	Retailer	Export Agency	Any other

12. Marketing channels
    A. Farmer producer organization
        1. Farmer price……
        2. Labour charges……
        3. Transportation charges……
        4. Margin…….
        5. Selling price……
    B. Wholesaler
        1. Buying price……
        2. Labour charges……
        3. Transportation charges……
        4. Margin…….
        5. Selling price……
    C. Retailer
        1. Buying price……
        2. Labour charges……
        3. Transportation charges……
        4. Margin…….
        5. Consumer price……
13. Price spread
        1. Consumer's price…….
        2. Net Price received by farmer…….
14. Marketing efficiency
        1. Price received by farmer……..
        2. Consumer's price…….
        3. Marketing cost…….
        4. Marketing margin……

Business performance:

a) Financial Aspects

	Year	2016-17	2017-18	2018-19	2019-20	2020-21
1	No. of members					
2	Current assets					
3	Fixed assets					
4	Inventory					
5	Current liabilities					
6	Long term liabilities					
7	Operating expenses					
8	Total expenses					
9	Total assets					
10	Total liabilities					
11	Turn over					
12	Margin distributed (Rs.)					
13	Gross profit / Loss (Rs.)					
14	Net profit / Loss (Rs.)					

b) Per cent of non -members business in

Input _____ Output _____

Problems:

a) Problems faced by FPO

1-Least severe 2-Not so severe 3-Severe 4-Quite severe 5-Highly severe

Lack of collective efforts in marketing	1	2	3	4	5
Lack of modern infrastructure facility	1	2	3	4	5
Loss due postharvest losses	1	2	3	4	5
Lack of assured quality in fruits and vegetables	1	2	3	4	5
Lack of adequate price in fruits and vegetables	1	2	3	4	5
Lack of access to market information and markets	1	2	3	4	5
Lack of proper transportation during peak season	1	2	3	4	5
Lack of storage for fruits and vegetables	1	2	3	4	5
Lack of processing units for fruits and vegetables	1	2	3	4	5
Lack of knowledge about exporting of fruits and vegetables	1	2	3	4	5

b) Any comments about the Performance/Working of FPO …….

c) Major reasons for Success/failure of functioning of FPOs according to yours opinion…….

Data of NPFPOs

		Nakrekal	NARAYANAPUR	BHUVANAGIRI	Adilabad	GURRAMPODE	MADHAPUR	PENTAVELLI
I	**BASIC**							
1	Total Members	125	203	252	210	223	160	286
2	Female Members	23	32	15	32	39	24	36
3	Male Members	102	171	237	178	184	136	250
4	Total Villages	8	6	9	5	7	4	8
5	Registration Number	U01113TG2018PTC129	U01100TG2019PTC129	U01100TG2018PTC126	U01111TG2018PTC122	U01114TG2018PTC129	U01100TG2019PTC131	U01100TG2019PTC131692
6	Registration Date	43465	03-01-2019	07-09-2018	43533	43460	43497	29-03-2019
7	Authorized share capital	500000	500000	500000	500000	500000	500000	500000
8	Commodity	Acid lime	Tomato	Tomato	Mango	Lemon	Tomato	Mango
9	Export activities	No	No	No	No	No	No	No
10	Percent higher prices offered	0.15	No	No	0.15	No	No	0.1
11	Brand name	No	No	No	No	No	No	No
II	**Marketing channel**							
1	**FPO**	**per ton**	**per 25kg**	**per kg**	**per kg**	**25kg bag**	**per 25kg**	**per ton**
a	Farmer Price	43000	190	12	35	600	180	37000
b	Labour charges	1500	25	1	1	60	30	1500
c	Transportation charges	4800	30	1	2	150	75	2500
d	Margin	4500	15	2	3	100	20	2500
e	Selling Price	53800	260	16	41	910	305	43500
2	**Wholesaler**							
a	Buying price	53800			41	910		43500
b	Labour charges	2000			1	50		1500
c	Transportation charges	3700			5	30		5500
d	Margin	2500			4	100		3500
e	Selling Price	62000			51	1090		54000
3	**Retailer**							
a	Buying price	62000	270		51	1090	305	54000
b	Labour charges	1800	20		2	45	20	2500
c	Transportation charges	1600	35		1	150	25	1500
d	Margin	6500	75		7	200	60	5500
e	Selling Price	71900	400	16	61	1485	410	63500
III	**Price Spread**							
1	Consumer Price	71900	400	16	61	1485	410	63500
2	Net price received by farmer	43000	190	12	35	600	180	37000
IV	**Marketing efficiency**							
1	Net price received by farmer	43000	190	12	35	600	180	37000
2	Consumer Price	71900	400	16	61	1485	410	63500
3	Marketing Cost	15400	110	2	12	485	150	15000
4	Marketing margin	13500	90	2	14	400	80	11500
V	**Financial Aspects**							
1	No. of members	125	203	252	210	223	160	286
2	Current assets	70000	120000	50000	100000	120000	95000	65000
3	Fixed assets	240000	340000	280000	391000	350000	615000	250000
4	Inventory	45000	35000	20000	35000	50000	60000	40000
5	Current liabilities	97000	135000	73000	125000	148000	125000	95000
6	Long term liabilities	172000	200000	170000	270000	215000	417000	142000
7	Operating expenses	36000	44000	75000	60000	55000	77000	36000
8	Total expenses	60000	100000	100000	110000	150000	155000	100000
9	Total assets	355000	495000	350000	526000	520000	770000	355000
10	Total liabilities	269000	335000	243000	395000	363000	542000	237000
11	Turn over	700000	500000	1000000	800000	650000	720000	800000
12	Margin distributed (Rs.)	0	0	0	0	0	0	0
13	Gross profit / Loss (Rs.)	245000	320000	175000	300000	235000	325000	245000
14	Net profit / Loss (Rs.)	185000	220000	75000	190000	85000	170000	145000
VI	**Problems**							
1	Lack of collective efforts in marketing	4	5	3	4	3	4	4
2	Lack of modern infrastructure facility	3	3	2	3	2	2	2
3	Lack of awareness about concept of FPOs among the membe	3	4	4	3	3	5	4
4	Lack of assured quality in fruits and vegetables	2	3	2	2	4	3	4
5	Lack of adequate price in fruits and vegetables	3	2	3	3	4	4	4
6	Lack of access to market information and markets	1	3	2	4	3	3	2
7	Lack of proper transportation during peak season	3	2	3	3	1	3	3
8	Lack of storage for fruits and vegetables	2	1	2	2	2	2	2
9	Lack of processing units for fruits and vegetables	5	2	2	1	3	3	2
10	Lack of knowledge about exporting of fruits and vegetables	3	1	3	3	1	2	3

Data of GPFPOs

I										
	BASIC	**Kollapur**	**Aadharsha Enabavi**	**Maldakal**	**F3**	**Nelathalli**	**Wanaparthy Girijana**		**Kattangur**	
1	Total Members	530	467	549	493	404	500		531	
2	Female Members	65	22	2	168	106	25		15	
3	Male Members	465	445	547	325	298	475		516	
4	Toal Villages	13	11	10	15	16	15		14	
5	Registration Number	U01403TG2016PTC102967	U01500TG2018PTC129007	U01110TG2019PTC129774	U01400TG2019PTC130431	U01111TG2018PTC127852	U01110TG2018PTC125321		U01100TG2017PTC130167	
6	Registration Date	29-01-2016	14-12-2015	15-01-2017	11-02-2018	05-12-2018	27-06-2018		30-01-2016	
7	Authorized share capital	10,00,000	5,00,000	5,00,000	5,00,000	5,00,000	10,00,000		5,00,000	
8	Commodity	Mango	Vegetables	Sweet orange	Papaya(O)	vegetables	Mango		Lemon	
9	Export activities	No	Yes	No	No	Yes	No		No	
10	Percent higher prices offered	20%	15%	8%	20%	30%	20%		5%	
11	Brand name	No	No	No	F3	No	No		No	
II	**Marketing channel**									
	1 FPO	per ton	per kg	per ton	per ton	per 5kg	per ton		25kg bag	
	a Farmer Price	55,000	25	65,000	25,000	200	50,000	-	900	
	b Labour charges	2,500	2	1,500	1,500	5	3,000	-	50	
	c Transportation charges	3,000	5	8,000	6,000	15	1,500	-	100	
	d Margin	7,500	2	1,000	9,000	30	5,500	-	50	
	e Selling Price	68,000	34	75,000	41,500	250	60,000	-	1,100	
	2 Wholesaler									
	a Buying price	-	0	75,000	0	0				
	b Labour charges	-	0	1,000	0	0				
	c Transportation charges	-	0	1,200	0	0				
	d Margin	-	0	2,300	0	0				
	e Selling Price	-	0	80,000	0	0				
	3 Retailer									
	a Buying price	68,000	34	80,000	0	250	60,000			
	b Labour charges	1,500	2	1,000	0	10	2,000	50	1,100	
	c Transportation charges	1,000	1	1,000	0	15	1,000	100		
	d Margin	9,500	4	8,000	0	30	10,000	250		
	e Selling Price	80,000	41	90,000	41,500	305	73,000		1,500	
III	**Price Spread**									
	1 Consumer Price	80,000	41	90,000	41,500	305	73,000		1,500	
	2 Net price received by farmer	55,000	25	65,000	25,000	200	50,000		900	
IV	**Marketing efficiency**									
	1 Net price received by farmer	55,000	25	65,000	25,000	200	50,000		900	
	2 Consumer Price	80,000	41	90,000	41,500	305	73,000		1,500	
	3 Marketing Cost	8,000	10	13,700	7,500	45	7,500		300	
	4 Marketing margin	17,000	6	11,300	9,000	60	15,500		300	
V	**Financial Aspects**									
	1 No. of members	530	467	549	493	404	500		531	
	2 Current assets	10,50,000	8,50,000	9,00,000	4,60,000	6,00,000	3,25,000		3,50,000	
	3 Fixed assets	11,00,000	10,00,000	10,00,000	6,00,000	4,65,000	10,36,000		12,00,000	
	4 Inventory	1,00,000	45,000	40,000	66,000	1,05,000	50,000		1,00,000	
	5 Current liabilities	6,50,000	5,50,000	6,00,000	2,70,000	3,50,000	2,00,000		2,00,000	
	6 Long term liabilities	5,70,000	3,75,000	2,47,000	3,76,000	3,32,000	5,80,000		7,76,400	
	7 Operating expenses	60,000	45,000	36,000	90,000	50,000	50,000		3,00,000	
	8 Total expenses	2,00,000	1,75,000	1,00,000	1,20,000	1,20,000	70,000		4,50,000	
	9 Total assets	22,50,000	18,95,000	19,40,000	11,26,000	11,70,000	14,11,000		16,50,000	
	10 Total liabilities	12,20,000	9,25,000	8,47,000	6,46,000	6,82,000	7,80,000		9,76,400	
	11 Turn over	30,00,000	25,00,000	50,00,000	35,00,000	50,00,000	30,00,000		90,00,000	
	12 Margin distributed (Rs.)	-	-	-	-	-	-		-	
	13 Gross profit / Loss (Rs.)	15,00,000	13,75,000	11,00,000	7,00,000	10,00,000	6,00,000		10,00,000	
	14 Net profit / Loss (Rs.)	13,00,000	12,00,000	10,00,000	5,80,000	8,80,000	5,30,000		5,50,000	
VI	**Problems**									
	1 Lack of collective efforts in marketing	2	3	2	2	2	3		3	
	2 Lack of modern infrastructure facility	3	2	3	3	4	1		4	
	3 Lack of awareness about concept of FPOs among the membe	2	2	2	1	1	2		2	
	4 Lack of assured quality in fruits and vegetables	1	3	2	2	3	1		3	
	5 Lack of adequate price in fruits and vegetables	4	3	3	3	3	4		3	
	6 Lack of access to market information and markets	3	2	3	2	2	3		2	
	7 Lack of proper transportation during peak season	1	2	2	3	3	1		1	
	8 Lack of storage for fruits and vegetables	4	5	3	4	3	1		4	
	9 Lack of processing units for fruits and vegetables	2	4	5	5	3	3		5	
	10 Lack of knowledge about exporting of fruits and vegetables	2	5	5	4	4	3		5	