



A Case Study of Dairy-Based Farmer Producer Company in Haryana: Collective Action Approach for Enhancing Farmer Income

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Authors' contributions

This work was carried out in collaboration among all authors. Author SK designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Authors DKM and VSM managed the analyses of the study. Author VSM managed the literature searches. All authors read and approved the final manuscript.

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Case Study

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ABSTRACT

The concept behind Farmer Producer Organizations is that farmers, who are the producers of agricultural products, can form groups and register themselves under the Indian Companies Act 1956. The aim is to enhance farmer's income, capacity building, competitiveness, and increase their advantage in emerging market opportunities. To examine the role of farmer producer organization in enhancing farmers, a case study was conducted in Karnal District of Haryana. Study the management and governance system of FPC and assess the impact of FPC on members was the objective of the case study. Personal interviews and group discussion methods were used for data collection and gathering information on FPC. Mishti farmer producer organization was established on 25 march 2013 for collecting, processing, and marketing milk and milk products. It covered eight villages of Karnal and collect raw milk from members and non-members farmers at high price than other value chain actors. The result of the study indicate that farmer who supplies milk to FPC, get 8-10 rupee per lit high price than others. It also provides bonus to member farmers who are

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shareholders of the company and their income from dairy farming is enhanced by 25-30 percent. FPC also plays a significant role in enhancing the backward and forward linkage of farmers and capacity building of farmers in different agricultural aspect. Members of FPC are highly satisfied with the services provided by FPC and its performance in local areas.

Keywords: Farmer producer company; board of director; stakeholders; dairy based; capacity building and farmer.

1. INTRODUCTION

Indian government has been promoting a new form of collectives called Farmer Producer Organizations (FPOs) to address the challenges faced by the small and marginal farmers, particularly those to do with enhanced access to investments, technological advancements, and efficient inputs and markets. The year 2014 is being observed as the "Year of Farmer Producer Organizations (FPO)" by the Government of India. Aggregating producers into collectives is now universally accepted as one of the most effective means of reducing the risk in agriculture and improving the access of small and marginal producers to investments, technology, and markets [1]. Several thousand Farmer Producer Organizations (FPOs) exist across the country, registered under various statutes such as the cooperative laws, trusts, federations, and lately under the Companies Act as producer companies [2]. The core mission of the Small Farmer Agribusiness Consortium (SFAC) is focused on increasing the productivity of small and marginal farmers, value addition, and efficient linkages between producers and markets. As part of this mandate, SFAC has taken up an initiative, supported by the Department of Agriculture and Cooperation (DAC), to incubate farmer producer organizations throughout the country. SFAC is backing up the process with intensive training of RIs, development of tool kits and other literature, and monitoring the institution-building process in partnership with NABARD Consultancy Services [3]. Farmers Producer Organizations are groups of rural producers coming together to form organizations, to pursue specific common interests of their members developing technical and economic activities that benefit their members, and maintaining relations with partners operating in their economic and institutional environment. Farmers Organizations (FOs) are essential institutions for the empowerment, poverty alleviation, and advancement of farmers and the rural poor [4]. Farmer producer companies in India came into existence as a legal entity after necessary modification of the

Indian Companies act (1956) by adding section 9A in the year 2003 [5]. Farmers' producer companies can be seen as hybrids between private companies and cooperative societies. The producer-company concept is aimed to combine the efficiency of a company with the spirit of traditional cooperatives [6]. The concept of cooperative is one of the options available for the producers to organize themselves to move up in the supply chain by value addition and business ownership. However, the cooperative system in the country has been infected by several inadequacies [7]. The Indian farmer is connected to the Indian consumer through various supply chains, each of which has evolved. Supply of inputs such as seed, fertilizer, and machinery, market linkages, training and networking, and financial and technical advice are among the major activities of FPO [8]. There is a need to synchronize the stakeholders including the state and central governments, officials, bankers, financial institutions, private sector organizations, civil society groups, elected members, and others to popularize the FPO concept. FPO is a means to bring together the small and marginal farmers and other small producers to build their business enterprise that will be managed by professionals [9]. FPO can help farmers in the production of various agricultural produce as well as during the process of marketing the crops. Farmer organizations offer small farmers to participate in the market more effectively and collectively, they are in a better position to reduce transaction costs of accessing inputs and outputs, obtaining the necessary market information, securing access to new technologies, and tapping into high-value markets, allowing them to compete with larger farmers and agribusinesses [10]. In this context, a case study was conducted to assess the role of farmer producer companies to enhancing farmer income.

2. GENESIS OF FPC

Mr. Sanjeev Kumar is a progressive and resourceful farmer of the Karnal district of Haryana. He dropped from school after the

12th grade and started his traditional work that is farming. He is a progressive and innovative farmer so he leaves the traditional pattern of agriculture and moves on to a modern cash crop farming system. He starts the production of mushrooms, baby corn, and other cash crops at the commercial level. He is not satisfied with his present work because the farming of cash crops is seasonal and after over the season he has no work to do in the field. He wants round the year work for his livelihood. He was searching for different options and opportunities along with farming to engage himself but he was not satisfied at all. One day he watched the TV and saw the debate on farmer producer organization at parliament. He sees that a lot of debate was going on FPOs and their benefit to farmers. He has seen it carefully and decides to start a FPOs but he does not have much knowledge about FPOs. He is an innovative farmer and well aware of the use of smart phones and the internet. He searches about FPOs more on the internet, reads literature, and collects information from an expert about FPOs. After ensuring that FPOs are good and beneficial for the farmer he finally decides to register FPOs. He wants round the year job and he discussed with scientist and expert that what business he has to do through FPOs which provide round the year work to him. After the opinion of the expert, he comes to the point that only dairy farming is the business among all agricultural work which provide round the year job and income to farmers. Then he registers his dairy-based FPC with the help of CA. The major thing here is that he did not take any help from the FPC promoter resources institution. Presently many institutions are responsible for developing FPC but he did not get any financial and physical help from the government department. He registers his FPC by own effort and presently doing successful with the huge amount of profit. The FPC was registered under Section 581-C of Part IX-C of the Companies Act, 1956 under a special provision called Producer Company on August 21, 2013, on 25/03/2013 with the name of "Mishti Farmer Producer Company Limited." The corporate identity number of FPC is 01403HR2014PTC052272. It started with 10 registered shareholders and has reached 230, spread across 8 villages in the Karnal district of Haryana. Mishti Farmer Producer Company Limited working with the farmers in the local areas since 2013. The objective of members was to build an institution that would provide and ensure the sustained milk market, the high price of milk, earn a maximum share of the producer in

consumer rupees, and carry out the activities like processing and marketing of milk and milk products by farmers themselves as an entrepreneur. The company was set up to build producers' institutions to address the emerging requirements of the producers as well as solving the short and long-term issues through collective action approach. The issue was:

- To enhance the productivity of animals by creating awareness among members about good dairy farmers and scientific dairy farming practices.
- To make quality inputs available timely at reasonable prices
- To get a remunerative price of milk and eliminate middlemen from the milk value chain
- Value addition activities for milk production.
- Ensure round the year stability of milk marketing and its price
- Awareness and training on green fodder production as well as its importance in milk production
- Awareness program on importance of mineral mixture feeding, bypass fat and balances ration, etc.

2.1 Membership

The membership of the company is diversified and inclusive. Out of 230 shareholders, 50 members belong to landless households, who depend on agricultural and wage labour for their incomes. 120 members are marginal, 40 are small landholdings and the rest 20 members have large landholdings. The most important character in membership is that the share of women in shareholding is very high. Out of 230 members, 100 are women shareholders. In terms of social groups, it is again diverse representing 120 members from Backward Class (BC) and 73 from Scheduled Caste (SC), and 37 members from General Cast. FPC has significant heterogeneity among members. Among 230 members, 50 are marginal, 120 are small, 40 medium, and 20 are large farmer's members of FPC.

2.2 Shareholding

Presently total shareholder of the company is 230. The minimum share value is INR 100 per share. At present, it has a paid-up capital of INR 10 lakh against the authorized capital of INR

17lakh. All shareholders are regular members of FPC and all have an individual share in FPC.

2.3 Structure of FPCs

The company has a three-tier structure consisting of – farmers (shareholders) as the members of the groups at the village, panchayat, and cluster level. The base is the farmer interest group or dairy farmer club at the village level. These groups were formed based on the need, interest, and willingness to join FPC at the village level. Each FIG has a voluntary leader called the president or secretary of the group. He is also responsible for the collection of milk at the primary collection centre at the village level. He is responsible for communicating the group's requirements and their demand with the FPC board of directors. At the second level, there are different managers responsible for carrying out the function of production, marketing of the product. The manager is elected or selective professional based on their skill in particular but they are shareholders of FPC. They are paid for their services. One chairman and CEO of the company is responsible for monitoring all activities of FPC. There is much field-level staff, labour, and skilled person to carry out different activities in FPC. These skilled staff, field person, and labour are paid and hired from outside for different work in FPC. FPC held quarterly directors' meetings, during this time the requirements and demand from the different groups are discussed and appropriate measures are taken to address these on a priority and feasibility basis. The smartness of this FPC is that they used social media and smartphones for marketing and field-level work so they need less staff for the marketing of the product. FPC have WhatsApp group, social site, and website so all order and requirement of the product, communicating of important information, etc. are done through these social media. It saves the time and cost to the company. This also helps BOD, CEO, and chairmen for monitoring all the activities of FPC from anywhere and anytime.

2.4 Governance

The company has a Board of directors, consisting of 5 active stakeholder members. As per land holdings, among five members 2 are small or marginal farmers, 2 are large farmers and 1 are landless directors of Producer Company. The CEO of the company is the promoter of the company and has an ex-officio role on the board. He is also part of BOD. Further

there are two sub-committees under board of directors to manage the whole business activity of FPC and smooth functioning and sharing of responsibilities among active stakeholders. The BOD conduct meeting quarterly regularly and farmer can participate in this meeting. A large meeting with all members, BOD, and other farmers is conducted once a year, and participation of all members in this meeting is necessary. The major decision regarding FPC policy, mandate, and its functional mechanism is taken by BOD and accepted by all members. BOD is elected by all members through voting or sometimes they select it without voting with the decision of majority members. Each director is assigned different role in different committees as their interest and their level of competency dictates. Some members play multiple roles in all committees since some of the functions and responsibilities of the members overlap. The CEO is responsible for the implementation of all these decisions. All financial activities of FPC are monitored by CA.

2.5 Production Committee

This committee has one production manager, five supervisors, and 40 other technical, skilled staff and labor for the production and processing of milk in FPC. A production manager is responsible for the monitoring of all activities like processing and production of the product, quality control, packaging, and storage of the product. Different product sections have a separate supervisor who works under the guidance of the production manager and other technical and labour work under the supervision of this supervisor. The production committee manufactures the product based on the demand of the market. The demand for a particular product in a particular market is assessed by the marketing committee and they send it to the production manager. Further production manager manufactures the product according to the demand of the product in the market.

2.6 Marketing COMMITTEE

There is four marketing managers who are work in the market in different places. The role of these managers is to assess the demand for a particular product in a particular market. They closely work with wholesalers and retailers in the market and get an order of their desired demand for a particular FPC product. The manager collects data of daily requirements of different products from different customers and sends it to

the CEO or chairmen through a smartphone, WhatsApp, or voice call. CEO/Chairmen take orders and place orders according to the required quantity. They make the route of the delivery channel of the product and load the product in the vehicle which is going on the same route to deliver the product. Further, one vehicle with a supervisor delivers the product at the doorstep of the wholesaler, retailer, and customer.

2.7 Major Services Delivery

2.7.1 Product market linkage

Major work of this FPC is to procure produces (milk) from the farmers at high price, processing it, and selling them to big traders, retailers, and direct customers through the outlet for getting a maximum share of the producer in consumer rupees. The extra benefit earned from the selling of value-added products is distributed among FPC members based on their share. So the benefit which was earned by middlemen through the selling of value-added farmer product (which he purchases from a farmer at a low price) is directly going to farmer pocket and this is the main objective of FPOs. In FPC a farmer is the

producer, processor, and seller so they eliminate the middlemen from the value chain and FPC increase the producer share in consumer rupees. Second, it provides and ensures as table milk market to dairy farmers and through FPC farmers can sell round the year milk without any much price fluctuation. They also collect milk from the farmer through a milk collection centre at the village level and give timely payment to the farmer without any delay.

2.7.2 Other services

Providing awareness on clean milk, training, and support on the different dairy farming aspects to farmers at the village level. They also help in organizing the supply system to meet various input requirements of the members at the village. FPC also helps in the capacity building of farmers on scientific dairy and cash crop farming, animal health and their treatment, improved and low-cost methods on feed and fodder production, and other improved agricultural practices. They also create awareness among farmers and inform them about different government agricultural schemes for the welfare of the farmers.

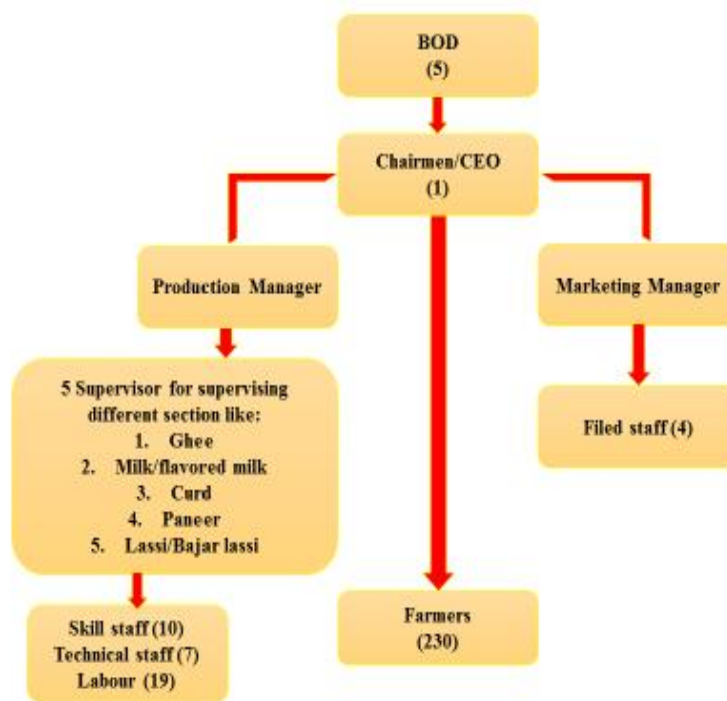


Fig. 1. Structure of FPC

2.7.3 Milk collection and marketing system

FPC doing business with both members and non-members dairy farmers. The difference in both is that it provides one rupee per liter high to members than non-members. Around 150 members and 652 non-members are daily suppliers of milk to FPC. The milk collection process is done in two types. First, the FPC has its primary collection centre at all eight villages which come under its operation areas. All members and non-members deliver their milk to these collective centres both on time and the company makes weekly payment to dairy farmers. The collection centres run by a commission agent. He may be a member or non-member of FPC and he works on commission. Presently the company provides four percent commission to a collection agent. They collect the milk and the milk from the collection centre is picked up by the company vehicle evening and morning. Second, the company has five contractors for supplying milk to the company from different areas of Haryana. They collect milk, chilling it, and supply milk to FPC based on the demand of FPC at the present market rate of milk. After collecting milk next step is the processing of milk in different products. The major product of the company is ghee, curd, flavoured milk, lassi, and milk, DTM, full cream milk, paneer, mava, and sweet lassi. Product is prepared based on the market demand and the rest milk is sold indirect form of milk after pasteurization and packaging in half-liter packing. They also keep some surplus of milk and milk products. Selling of milk and milk product is done through a three-channel. The company sends its products to wholesalers, a retailer based on the demand for a product which is assessed by marketing staff regularly. FPC also has its three-outlet in Karnal and Kurukshetra. Through the outlet, they sell all their products direct to consumer.

2.8 SWOT Analysis of Mishti

Mishti milk Producer Company has many strengths to build empire of dairy based industry and become a role model of start-up enterprise for other people who are interested to start their own business. At the same time, FPCs working committees make a concerted effort to overcome its gaps/shortcomings and get prepared to take the future advantage of opportunities in dairy industry through creating brand value among customers both domestic and international level:

2.8.1 Strength

- Effective management and governance system as well as dynamic leadership and direction by directors
- Business areas of FPC are local so they have plenty of raw material at the local level at low cost, processing and marketing cost is also low due to nearby market area, high demand of FPC product in local market and trust of FPC product among local people.
- All products are well packed in good quality and attractive packing which attract the customer. There are no chances of adulteration of product at market and customer get hygienic and fresh product.
- Guidance and support of eminent institutions in dairy sector.
- Good assets base – it's land for building manufacture plant, warehouse, small carrier van (TATA Ace), and other required equipment and material
- Transparent and timely payment system makes trust among stakeholders-digital/cheque payment to all stakeholders
- Standard quality control measure at every step of production from milk collection to processing and marketing of product
- Efficient milk collection system at the grass-root level and good rapport in the local market for selling milk and milk products.

2.8.2 Weaknesses

- Milk is a perishable product so there are always chances of loss in this business.
- Lack of proper cold storage facilities for milk and milk products.
- Farmer is unaware of scientific dairy and clean milk production practices.
- Seasonal fluctuation in the price of milk as well as production.
- Mastitis or infected milk produce by farmers reduces the quality of milk and milk products.
- Lack of trained technical staff for processing and marketing of milk and milk products.
- Unrecognized and unorganized milk market in India mostly in local and peri-urban areas.
- Lack of government support for FPC.

Table 1. The price difference between different marketing channels of milk

S.NO.	Milk sell to middlemen by farmers	Milk purchase by FPC from Members	Milk purchase by FPC from Non-Members
Cow milk	25/lit	30/lit	29/lit
Buffalo milk	32-35/lit	46/lit	45/lit

Table 2. Mishti milk and milk products price list

S.NO.	Product	Quantity	Price
1	Ghee	1 kg	450
2	Curd	15 kg	572
3	Milk (full cream)	1 kg	54
4	Tond milk	1 kg	42
5	DTM	1 kg	38
7	Lassi (Bajar/sweet)	200 ml	20/15
8	Flavored milk	200 ml	25
9	Paneer	1 kg	250
10	Mava	1 kg	50

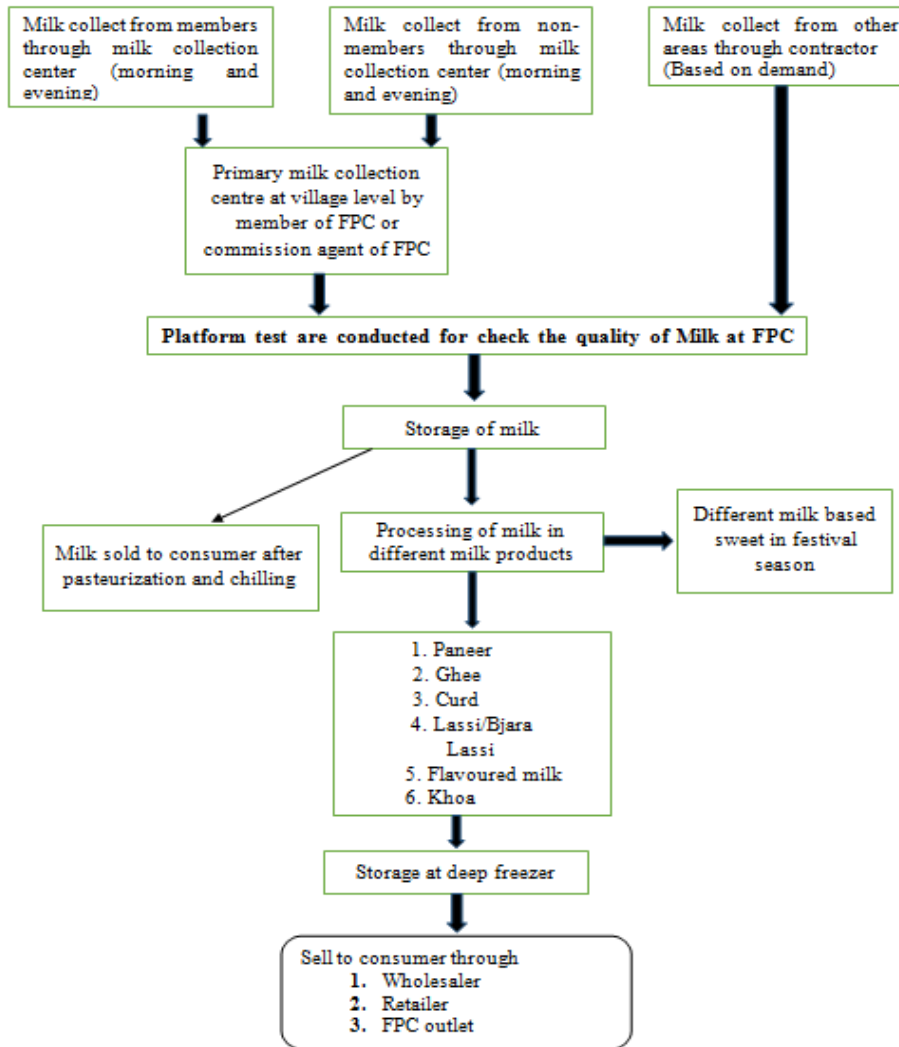


Fig. 2. Procurement, processing, and distribution of milk and milk products

Table 3. The basic profile of Mishti Farmer Producer Company limited

Producer company	Name of the company: Mishti Farmer Producer Company Limit.				
Parameter	1 st year	2 nd year	3 rd year	4 th year	5 th year
Date of registration	25/03/2013				
Corporate Identity No	U01403HR2014PTC052272				
Authorized capital (Rs Lakh)	10 lakh	12 lakh	15 lakh	17 lakh	17 lakh
Paid up capital (Rs. Lakh)	3 lakh	5 lakh	7 lakh	7 lakh	10 lakh
Minimum share capital	100 rupees	100 rupees	100 rupees	100 rupees	100 rupees
Main promoter/facilitator	Mr. Sanjeev Kumar				
Total number of shareholders	10	35	75	180	230
Shareholding Pattern	All shareholder purchase share individually				
Education profile of main farmer promoter	12 th				
No. of directors	5	5	5	5	5
BoD meeting	Quarterly	Quarterly	Quarterly	Quarterly	Quarterly
No of BoD Meetings	4	4	4	4	4
No. of Prof. Manager s(who pays them)	2	3	3	3	4
No. of employees	20	27	32	38	40
Avg. Size of holding of member (Range) in Ha	Landless- 50 Marginal -120= 1-2 hectare Small-40= 3-4 hectare Large-20= > 5 hectare				
Villages covered	3	4	6	8	8
Number of women as members	20	35	55	76	100
Business activity of FPC	Milk collection, processing, and marketing of milk and milk products				
Status of the company (Profit/loss in Rs.)	Profit	Profit	Profit	Profit	Profit
Turnover (Rs. Lakh)	63 lakh	1.3 crore	1.7 crore	3.5 crore	5 crore
Source of working capital	A loan from a bank, members share, and short term loan from aditya or money lender				
Corporate and govt. linkage	FPC have good linkage with various institutions. State agriculture and animal husbandry department NABARD and SFAC etc.				
Type of services provide	Advisory services, marketing facilities for milk, training, awareness, and capacity building of farms on different dairy aspects and cash cropping system.				
Service fee charged	Free of cost (it does not provide input services, they only provide capacity building services to farmers so it is free of cost).				
Satisfaction with various services (%)	Members are highly satisfied with the services provided by FPC and its performances in the dairy sector.				

2.8.3 Opportunities

- Increased consumer awareness and demand for branded and processed dairy products among consumers.
- FPC has enough potential to expand its business to small towns and other geographic locations in the country.
- Increased demand for packed milk and milk product and FPC already has a strategy of selling all product in standard packaging which will increase the share of the company in the market
- Easy availability of raw material at a reasonable price in local areas.
- An increase in the consumption of milk and milk products will lead to an increase in sales for the company.
- Long-term sustainability of FPC in the market due to diversity in products.
- Market/demand study on certain products by market staff help them to produce need-based and it's supplied in the market which reduces the wastage of product, saving time and cost of FPC.

2.8.4 Threats

- Increased global and local competition in the market.
- A large number of middlemen in the milk market.
- Changes in government policy.
- Increasing the cost of production due to increasing the other cost like labor cost, raw material cost, etc.
- Not ensure the long-term sustainability of FPC in the market.
- Conflict and collaboration issue among shareholders

2.8.5 Impact of FPC

- Increase in net return to the farmer: 8- 10 rupees/liter milk.
- Provide ensured milk market to farmers.
- Increase the income of member farmers through value addition and selling of milk products by 25-30%.
- Shareholders are getting extra benefits or bonuses due to participation in the value chain from production to marketing by farmers themselves and it around 5000 to 100000 based on their share in the company.

- Doorstep milk collection facilities, timely payment, and bonuses to shareholders.
- Develop entrepreneurship among farmers and employ farmers and professionals in rural areas.
- Eliminate middlemen from the milk value chain and enhance the producer share in consumer rupees
- Create awareness among people about scientific dairy farming, government policy, and also help in capacity building of farmers in different aspects of the agricultural sector.
- Overall Mishti Farmer Producer Company is fully dedicated to the maximum welfare of farmers and enhancing their living standards.

3. CONCLUSION

Improvement of socio-economic status of small and marginal is possible only through collective action approaches and commercialization of their agricultural activities. Farmer Producer Company (FPC) is a means to bring together the small and marginal farmers and other small producers in the local communities to build their own business enterprise that will be managed by professionals and owned by farmers. FPC help farmers to enhance their share in secondary agricultural practice like processing, value addition and marketing of agricultural produce by farmers themselves. This enhances the producer share in consumer rupees, reduced transportation cost, decrease cost of cultivation, enhance bargaining power of farmers and increase the backward and forward linkages of farmers. Due to this FPCs become important grass root level institution for overall socioeconomic development of small and marginal farmers in India. Finally we can conclude that the dream of doubling a farmer's income is only possible through collective action approaches i.e. Farmer Producer Company.

DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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