

Problems faced by the vegetable based-Farmers Producer Companies: A descriptive analysis

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Received: March 2022/ Accepted: May 2022

Abstract

The study was conducted to identify the problems faced by Farmers producer companies working in Vegetable production, processing and value addition. Three successful companies working in vegetable and food processing industries were selected through purposive sampling. An *Ex-Post Facto* research design was used. A semi-structured interview schedule was prepared. Problem faced by horticultural farmers in different Farmers Producer Companies were identified under five dimensions *viz.* technical problems, organizational, economic, infrastructural, and marketing problems. Shortage of skilled labour, lack of knowledge of recent technologies in horticulture, ignorance of members, social security, lack of linkages with other farmers organization, lack of enough seed capital, lack of power supply, price fluctuation of horticultural crops and delayed payment to farmers from FPC were the major constraints that faced by the vegetable based FPOs.

Keywords: Vegetables, Farmer Producer Organization (FPO), Farmer Producer Company (FPC), Problem faced

Introduction

India is the world's second largest producer of vegetables, with 191.76 million tones of production. However, due to a lack of efficient handling and infrastructure, India has been one of the world's largest food wasters. Post-harvest losses cost Rs 92,651 crore (\$13 billion) every year due to insufficient storage,

logistic, and financing infrastructure, as well as harvest and post-harvest losses of main agricultural produce (CIPHET 2015). According to the Committee on Doubling Farmers' Income, the proportions of product that farmers are unable to sell in the market at the national level are 34% and 44.6% for fruits and vegetables. This means that farmers lose roughly Rs 63,000 crore every year since they are unable to sell the produce in which they have already invested. Due to the expense and lack of sufficient facilities, it is estimated that only 10-11% of fruits and vegetables grown in India use cold storage. Another obstacle is financial. Due to the extreme perishability of horticulture crops, horticultural producers are required to sell their produce immediately after harvest, at whatever prevailing rate, to avoid storage troubles caused by a lack of finance and liquidity. The formation of FPO might be quite beneficial in this regard. The FPO can decrease yield losses by utilizing correct value chain and supply chain mechanisms (Yadav et al. 2022).

Farmers Producer Company (FPC) can mitigate the loss through ensuring better value chain management. The producer company concept has emerged as a new generation farmer's organization in India. It was introduced in 2002 by introducing a new part IX A in to the Companies Act 1956 under the chairmanship of economist Y. K. Alagh (Alagh 2007, Singh 2008 and Mukherjee et al. 2018a). Since then Indian farmers got a new opportunity to start expedition towards livelihood sustainability (Mukherjee et al. 2018b). The main objectives of Producer Company are procurement of inputs, production, harvesting, grading, pooling, handling, storage, marketing, selling or exporting the primary produce of the company members or import of goods or services for them in addition, processing of produce of members, manufacturing, sale or supply of machinery, consumables, conducting training and awareness programme, insurance of crop and livestock

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and providing guidance for efficient natural resource management etc. to members (ASA 2009; Chauhan 2015). Fruits and vegetables are suitable sector which can provide 2-4 times higher incomes to farmers than cereals. Near about 23% of total registered FPCs are working exclusively in horticulture and many more are working in mixed approach i.e. combination of agricultural and horticultural crops as production options. There is a rising concern that the Farmers Producer Company can act as a potential driving force for agricultural and rural development. Farmers Producer Company are working as 'engines' of development that can uphold the pennon of development even ahead of local level, offering benefits to the rest of society (Blokland and Gouët 2007). In reality, FPCs have favorable position of scale economies applies to input purchases and accumulation, processing, marketing of the farmers produce in bulk. In both these cases FPOs can bargain better prices. Through vertical, horizontal coordination and forward and backward linkage FPCs works in value-addition processes which has not only enhanced their dealing power but share in consumers' rupee. FPCs have minimized the risk of farmers through promoting crop and livestock insurances. It has diminished the cost of information seeking, connecting smallholders to more complex market situation and making farmers acquainted with the competitive business environment through capacity building and empowerment. But the farmer's producer companies are facing serious problems in formation and functioning. Therefore, it is needed to explore what are the specific problems that vegetable based FPOs are facing. The present study was conducted with the objective to study the problems of vegetable based FPOs.

Materials and Methods

Study area: The study was conducted in Maharashtra State of India. The state is one of the pioneers in escalating the growth of Farmers Producer Companies in India. Three successful companies working in vegetable, fruits and overall horticulture and processing industry were selected through purposive sampling based on five specific criteria viz. i. The FPC is working for more than 5 years successfully; ii. the FPC has a sizeable membership (more than 2000 members), iii. the FPC's turnover is more than Rs. 50 lakhs; iv. the FPC has several reported success stories and v. the FPC has a unique business model. The criteria based purposive sampling was useful to select an effective and functional companies working at ground level. Based on that, three companies had been selected. The Junnar Taluka FPC Ltd. was a FPC in initial development stage and working

in mainly vegetable sector. The Vasundhara Agro Producer Company Limited was selected as a company working mainly in fruits and some vegetable crops at moderate stage of growth. The Sahyadri Farms working both in fruits and vegetable was selected for the study as it had achieved a tremendous growth level. The data was collected from Pune and Nasik District of Maharashtra.

In this study, an *Ex-Post Facto* research design was used. A semi-structured interview schedule was prepared. Problem faced by horticultural farmers in different Farmers Producer Companies were identified under five dimensions viz. technical problems, organizational, economic, infrastructural, and marketing problems in a five point continuum scale ranging from 5 (most severe), 4 (severe) 3 (moderate), 2 (mild), and 1 (not at all).

Sampling and data collection: Focused group discussions (FGDs) and series of key informant interviews were carried out to identify the aspects of effectiveness. Additionally, previous effectiveness studies were also reviewed to prepare the survey instrument. The survey instrument was sent to experts for their comments and possible modification and improvement were done based on their recommendations. For easy understanding of the farmers, the instrument was translated in *hindi* (common language) and a pilot test of 20 farmers was done to further clarification of the questions. In-depth interviews were conducted with key informants to ensure the triangulation of data. Proper care was taken to make the respondents comfortable and unbiased recording of the data was ensured. The data were collected from 50 randomly selected members of the company, but due to incomplete response some interview schedules were rejected. Finally, a sample of 34 respondents of Vasundhara Agro Producer Company; 37 respondents from Junnar Taluka FPC Ltd. and 38 respondents of Sahyadri Farms were considered for analysis.

Statistical analysis: Comparisons of socio-economic characteristics of Farmers across the company were done through non parametric tests. For the statistical analysis, the data were analyzed using MS Excel and SPSS 20 software.

Results and Discussion

The nature and degree of problems faced by horticultural producer companies were different based on the level of growth of the FPCs. The Junnar Taluka Producer Company was in the early stage of growth, VAPCOL was in middle stage of growth whereas the Sahyadri Farms had attended a considerable growth phase.

Regarding production problems faced by the horticulture farmers of Producer Company (Table 1) two most important and severe problems were shortage of labour (4.48) and problem of irrigation (4.32) (Roy et al. 2019). It is very hard to take care of horticulture crops during the period of pre and post-harvesting. The area, production and productivity of horticultural crops are depending on the work force of the farmers or growers. Shortage of irrigation is another common problem faced by the agriculture sector in Maharashtra and therefore

the horticulture based Farmers Producer Companies. Horticultural crops, particularly vegetables require more water. Depletion of ground water, irregularity of rainfall has created problem in production of vegetables and fruits. The finding is similar with the findings of Reddy et al. (2017).

Technical problems are much prominent in small producer companies like JTFPC than the middle and large producer companies but some common problems

Table 1: Problems faced by the Horticultural Farmers Producer Company

S. No.	Statements of the problems	Junnar Taluka FPC Ltd.	Sahyadri Farms	Vasundhara Agro Producer Company Limited	Average
1	Production problems				
i	Poor access to inputs	3.98	3.87	3.97	3.94
ii	High costs of vegetable seeds	4.18	3.24	4.05	3.82
iii	Shortage of irrigation	4.57	3.97	4.43	4.32
iv	Shortage of skilled labour	4.65	4.12	4.67	4.48
v	Lack of quality planting material	4.68	2.18	4.24	3.70
2	Technical problems				
i	Lack of knowledge of recent technologies in horticulture	3.98	2.67	3.65	3.43
ii	Lack of technical guidance in high-tech horticulture	2.65	1.27	2.54	2.15
iii	Non availability of skill training in horticultural production	2.47	1.08	2.49	2.01
iv	Computer illiteracy of officials	2.54	1.08	2.16	1.93
v	Lack of grading and packaging skills	2.64	1.08	1.78	1.83
vi	Lack of value addition facilities	4.09	1.24	1.54	2.29
vii	Lack of knowledge about IPR issues	4.57	1.65	1.87	2.70
viii	Lack of knowledge about business administration (audit/ book keeping)	4.37	1.24	2.67	2.76
3	Organizational problems				
i	Lack of proper recognition and awarding	3.57	1.25	2.67	2.50
ii	Ignorance of member's social security	2.54	2.59	2.67	2.60
iii	Lack of linkages with other farmers organization	3.57	1.98	1.98	2.51
iv	Conflicts within organization	2.17	2.07	1.98	2.07
v	Partiality and favoritism in organization	1.28	1.01	1.07	1.12
vi	Corruption	1.01	1.07	1.01	1.03
vii	Lack of coordination	2.07	1.28	1.98	1.78
4	Economic problems				
i	Lack of enough seed capital	3.67	2.98	3.87	3.51
ii	Lack of loan from banks	3.68	2.21	2.47	2.79
iii	Lack of financial guarantee	3.87	2.01	2.30	2.73
iv	Lack of willingness of members to contribute for raising capital	2.57	1.89	3.67	2.71
5	Infrastructural problems				
i	Lack of power supply	3.67	1.28	2.98	2.64
ii	Lack of road connectivity to market	1.07	1.07	1.09	1.08
iii	Lack of storage facilities	1.02	1.09	1.06	1.06
iv	Lack of processing facilities	3.03	1.09	2.17	2.10
v	Lack of processing plants	2.64	1.0	1.29	1.64
6	Marketing problems				
i	Lack of marketing channel	1.64	1.0	1.19	1.28
ii	Price fluctuation of horticultural crops	3.24	3.29	3.57	3.37
iii	Exploitation by commission agents	1.59	1.15	1.57	1.44
iv	Lack of accessibility to market	1.07	1.02	1.01	1.03
v	Distress sale of horticultural produce	1.58	1.12	1.38	1.36
vi	Unable to create brand value	1.87	1.02	1.78	1.56
vii	Lack of export orientation	3.24	1.02	2.64	2.30
viii	Delayed payment from FPC	3.67	2.28	2.98	2.98

Note: The value are average of response ranges in 5 to 1 scale indicate (Most severe=5, Severe=4, Moderate=3, Mild=2, Not at all=1)

are lack of knowledge of recent technologies in horticulture (3.43), lack of knowledge regarding business administration (2.76) and intellectual property right issues (2.70). It was observed that some of the growers did not have proper knowledge of planting the plants or nurseries in a systematic way, medication of plants etc., which can hamper the productivity of horticultural crops. Sometimes, due to lack of knowledge of farming the plants get spoiled or die for the cause of not planting as per required method. Similar results also reported by Mukherjee et al. (2019) and Roy et al. (2015).

Knowledge regarding intellectual property rights is important as FPCs need to protect intellectual properties and should take precaution regarding infringement of others rights. Farmers of producer companies were generally not accustomed with the complex business administration procedure such as audit, bookkeeping, filing tax etc. This is kind of common problem for small farmer's producer companies in all sectors. As farmer's producer companies are business entity these activities are important and unavoidable. Therefore the farmers should at least have the basic knowledge of IPR, business administration, establishing value addition and processing plants etc. There is requirement of trainings and sensitization workshops to be conducted regularly in newly formed FPCs.

In organization related problems it was found ignorance of members social security (2.60), lack of linkages with other organization (2.51), proper recognition and awarding (2.50), were some common problems which had been highlighted by members of FPCs. Members security through crop insurance and personal insurance are required nowadays to provide a protection to members and provide a safety net. Farmers producer companies can take this initiative so that the members of the company can be resilient of different life stress, otherwise, the performance of company members and the company can be affected. It was found that institutional collaboration with other farmers organization was missing. In collaboration with other farmers based organization small FPCs can achieve more. In an organization it is important that the good worker should be recognized and rewarded so that the motivation for work can continue (Lawler and Shuttle 1973). The Board of Directors have great role to play here. They are the heads of company. They appoint the CEO, ensure that meetings are held on a regular basis, keep registers, produce yearly accounts, authorize loans to members, supervise day-to-day activity, and so on (Yadav et al. 2022). The BODs are also found several constraints such as less knowledge of how to strengthen FPO; less facility of storage of produce; members are not willing

to contribute for FPO etc. (Yadav et al. 2022) which in turn affecting the organizational growth of FPO.

Regarding economic problems lack of enough capital (3.51) was one of the severe financial problems. In every phase FPCs requires volume of investment and lack of enough capital. Another important issue is lack of individual loan from banks for small FPCs. The banks and financial institutions generally avoid the loan applications of small and marginal horticultural farmers. Although for bigger FPCs it was not a problem as the company itself takes guarantee for these loans. These findings are in line with Kakati and Roy (2017) who reported that Farmer Producer Companies have been performing poorly in terms of solvency, efficiency and profitability during their initial years.

Infrastructural problems like lack of power supply (2.64), and lack of processing facilities (2.10) hamper smooth running of small farmers producer companies (Roy et al. 2020). In terms of marketing, the FPO's key restrictions were a shortage of storage facilities, followed by processing facilities and a sale counter. It suggests a deficit in supply chain management which was also revealed in research of Deka and Goswami (2020) in West Bengal. Marketing is a specialized area and strength of producer companies than other farmer's organization but price fluctuation of horticultural crops (3.37) has been most important problem. In Maharashtra especially the onion and potato farmers were facing the problems as the price fluctuates every year depending upon the demand and supply dynamics in market. Delayed payments (2.98) and lack of export orientation (2.30) was found some problems of small FPCs.

The vegetable-based FPOs are facing many problems in production to marketing. These problems need to be addressed for enhancing the effectiveness and sustainability of FPCs in horticulture sector. Shortage of irrigation, skilled labour, lack of enough capital, price fluctuation of horticultural crops, dearth of knowledge of recent technologies in horticulture were the major problems faced by the producer company members. Capacity building and hand holding is required to make the FPOs sustainable.

Acknowledgement

The authors are thankful to IARI for conceptual support and NASF for funding support for the study.

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सब्जी उत्पादन, प्रसंस्करण व मूल्य संवर्धन में कार्यरत "फार्मर्स प्रोड्यूसर कम्पनीज के सामने आने वाले समस्याओं की पहचान हेतु यह अध्ययन किया गया। सब्जी एवं खाद्य प्रसंस्करण उद्योग को

सफलतापूर्वक चलाने वाले कम्पनियों का चयन उद्देश्यपूर्ण प्रतिदर्शों के आधार पर किया गया। एक पूर्व व्यापी शोध प्रारूप का उपयोग किया गया। एक अर्द्ध-संरचित साक्षात्कार सूची तैयारी की गयी। विभिन्न फार्मर्स प्रोड्यूसर कम्पनीज में कार्यरत औद्योगिक किसानों को होने वाले समस्याओं को कुल पांच आयामों जैसे-तकनीकी समस्याओं, संगठनात्मक, आर्थिक, ढांचागत एवं विपणन सम्बन्धित में आंका गया। कुशल श्रमिकों का अभाव, औद्योगिक फसलों की नवीनतम तकनीकों की जानकारी का अभाव, बीज पूँजी की प्रचुरता का अभाव, बिजली की आपूर्ति में कमी, औद्योगिक फसलों के मूल्यों में अस्थिरता एवं फार्मर्स प्रोड्यूसर कम्पनीज द्वारा देर से भुगतान जैसे घटकों को सब्जी आधारित फार्मर्स प्रोड्यूसर कम्पनीज में प्रमुख बाधाओं के रूप में पहचान की गयी।

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