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RESEARCH ARTICLE

Role of Actors in Farmer Producer Organization (FPO) based Millet Value Chain

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ABSTRACT

Farmers' collectives such as co-operatives and farmer producer organizations emerged as alternatives for increasing market participation and reducing transaction cost through collective action (Markelova et al., 2009; Valentinov 2007). Farmer producer companies can be considered as a hybrid between private companies and co-operatives (Trebbin 2014). The present study aims to identify the role of value chain actors like farmers, Farmer Producer Organization by mapping the value chain of millets and the retailers and the constraints faced by the farmers in the production of millets. The primary data was collected from the sample respondents of 60 farmers, one millet based FPO and three retailers of the FPO. Data were collected using a pretested well-structured interview schedule. The role of actors was constructed using the generic worksheets along with mapping of value chain millets and the constraints faced by farmers were analyzed using Garrett's ranking technique. The results of the study revealed that the farmers are not involved in the value addition for their produce. Monsoon failure, erratic rainfall and the non-availability of the quality seeds were the major constraints faced by the farmers.

Keywords: *Farmer Producer Organization, Millets, Value chain, Constraints*

INTRODUCTION

Farmers' collectives such as co-operatives and farmer producer organizations emerged as alternatives for increasing market participation and reducing transaction cost through collective action (Markelova et al., 2009; Valentinov 2007). Farmer producer companies can be considered as a hybrid between private companies and co-operatives (Trebbin 2014). Producer Organizations can be a potential solution to lack of value addition in agricultural commodities coupled with farmers in India disposing of their produce in unprocessed form. (Murray 2008). FPOs are farming start-ups which are being incubated by the centre through Small Farmer Agri-business Consortium (SFAC), rural development bank NABARD, agriculture and horticulture departments of state governments and NGOs. Each agency has its own criteria for selecting the project or promoting an institution to support. In India, There are of about 2092 FPOs registered under NABARD with 170 FPOs in Tamilnadu which stands second next to Karnataka. Under SFAC, 792 FPOs are registered with 11 FPOs in Tamilnadu (NABARD, 2019).

In the 12th Five year plan, Government of India had recognized the importance of millets in the food chain through National Food Security Mission (NFSM) and targeted an additional 25 million tonnes of food production with which the share allocated for millets was two million tonnes. The government of India had taken several steps to increase the cultivation and also the awareness about the millet and the millet products which was evident through the activities of the government in which the Food and Agriculture Organization had agreed to celebrate 'International Year of Millets' in 2023 based on India's proposal. The government of India had proposed that in the existing system of agricultural marketing, the bulk of the farmers sold their produce in which the farmers had received a fraction of the price paid by the ultimate consumer which need to be addressed. The farmer producer organizations provide the platform to the small and the marginal farmers for effective marketing and the production through which they could reduce the transaction cost of input access and also the regular flow of market information with which they could act accordingly so as to achieve the maximum profits and tap the high-value markets.

The objective of the study was to identify the

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role of actors (Farmers, Intermediaries (FPO), and Retailers) in the value chain by mapping the value chain of millets with reference to the Farmer Producer Organization and also study the constraints faced by the FPO member farmers.

MATERIAL AND METHODS

The research was carried out in the Pennagaram block of Dharmapuri District of Tamil Nadu. The Farmer Producer Organization namely Dharmapuri District Minor Millet Farmers Producers Company Ltd was established in the year 2015 with registered member farmers of about 1000 in the surrounding villages and supporting them in the cultivation of various crops particularly millets. The primary data was collected using the pretested well-structured interview schedule by personal interview. The survey was conducted in villages of Pennagaram block namely Arangapuram, Ballinjarahalli, Gowrisettipatty, kadamadai, Mamarathupallam, and Sigaralahalli. A total of 60 farmers with the Farmer Producer Organization and three retailers of the Farmer Producer Organization were selected for this study. The stakeholders were interviewed using a separate interview schedule. The role of the value chain actors was identified using the generic worksheet cross function (adopted from Nethravathi Ashok Patil *et al.,* 2015)and the constraints faced by the farmers were identified using Garett's ranking technique.

Garett's ranking technique was used to rank each other factor and those ranks were converted into per cent position by using the following formula,

$$\text{Per cent Position} = \frac{100 \text{ X } (R_{ij} - 0.5)}{N_j}$$

Where,

R_{ij}- Ranking given to the i^{th} attribute by the j^{th} individual

N_j - Number of attributes ranked by the j^{th} individual.

By referring to Garrett's table, the per cent positions estimated were converted into scores. Thus, for each factor, the scores of various respondents were added and the mean values were estimated. The mean values thus obtained for each of the attributes were arranged in descending order. The attributes with the highest mean value were considered as the most important constraints and the others followed in that order.

RESULTS AND DISCUSSION

Socio-economic characteristics of the sample farmers

From the table 1.1, it could be seen that majority of the farmers belonged to the above middle age groups' viz., age group of 41-60 (60.00 per cent) and as of education nearly 38.33 per cent of the farmers were of with primary education. Most of the farmers had agriculture and allied activities such as livestock and goat, sheep rearing as their primary occupation (100.00). 85 per cent of the farmers came under the small and the marginal farmer category.

Table 1. Socio- economic characteristics of the sample farmers (n= 60)

Factors	Respondents (in numbers)	Percentage
Age (years)		
<30	5	8.33
31-40	13	21.67
41-50	24	40.00
51-60	12	20.00
>61	6	10.00
Education Status		
Primary	23	38.33
High school	19	31.67
Higher secondary	10	16.67
Diploma/graduate	8	13.33
Annual income (Rs.)		
<1,00,000	19	31.67
1,00,001 – 2,00,000	16	26.67
2,00,001 – 4,00,000	14	23.33
>4,00,001	11	18.33
Family size (in numbers)		
Less than 4	17	28.33
4-5	34	56.67
More than 5	9	15.00
Farming experience (years)		
<10	3	5.00
11-20	13	21.67
21-30	28	46.67
>30	16	26.66
Land holding		
Marginal farms (<1 hec)	31	51.67
Small farms (1-2 hec)	20	33.33
Medium farms (2-4 hec)	9	15.00

Identification of the Value Chain Actors

The actors involved in the value chain are depicted in Fig 1. The value chain actors and their

functions in millets in the study area were identified using generic worksheet cross functions and it is presented in Fig 2. The functions of the actors were represented by blocking the cells of the table. The actors can perform more than one function. The value chain of the millets with the functions of the actors are depicted in Fig 3.

Role of Farmers

In the value chain, the farmers are at the first level of the actors. The majority of the farmers (85.00) growing millets in the selected study area were marginal and the small farmers. The produce of the farmers was sold to the farmer-producer company namely Dharmapuri District Minor Millet Farmers Producers Company Ltd in the Pennagaram Block. The farmer members are involved only in the production function and are not doing any kind of value addition activities such as grading, processing, etc., at the farm level.

Table 2. Constraints faced by the farmers

Constraints	Mean Score	Rank
Lack of rainfall	71.72	I
Poor quality of seeds	63.12	II
Price fluctuation	51.90	III
Poor quality of produce	46.02	IV
Lack of finance	43.00	V
Higher labour charge	41.58	VI
Pest and disease	36.30	VII

Role of Farmer Producer Organization (Dharmapuri District Minor Millet Farmers Producers Company Ltd)

The farmer producer organization was established in 2015 under the guidance of the department of agricultural marketing in the district of Dharmapuri. There are of about 1000 farmers in the FPO. The FPO provides technical assistance to the farmers, supplies inputs such as seed and the machinery for rent at subsidized rates to the member farmers of the FPO. It was also be involved in the procurement of the produce from the farmers at a reasonable price while compared to that of the open markets.

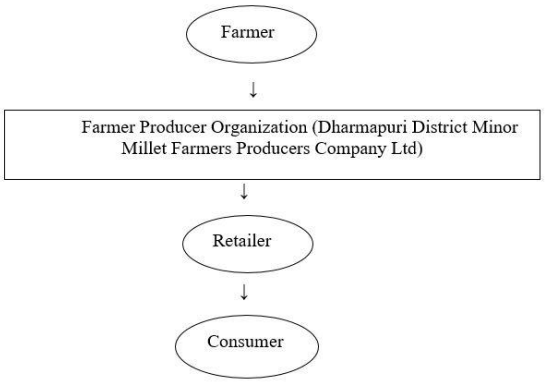

Figure1. Value chain actors

It is also be involved in the value addition of millets such as cookies, flour, sprouted flour, rice, etc...They have their own retail outlet at Pennagaram and also sells their products to other retailers in Hosur, Chennai and Coimbatore on a pre-order basis. FPO organizes training programs to the selected farmers on the value addition products. They are conducting regular meetings and supporting women through generating self-employment. The value addition is done through the help of women members with daily wage rate. The products are transported through the bus, courier Hence, they are supporting the farmers in both ways (i.e.) by providing forward and backward linkages. The products are sold in the brand name of 'DMillets'.

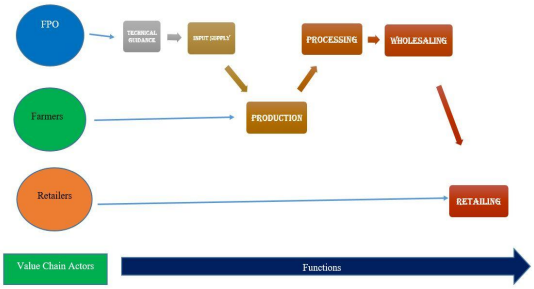

Figure 2. Generic Worksheet Crossing Functions to identify the actors in Value Chain of Millets

Role of Retailers

The retailers are dealing with millet products along with other products and they purchase the products directly from the FPO. They incurred marketing cost such as transportation and establishment of a retail shop. The retailers are also involved in educating the consumers about the health benefits and various dishes to be made from millets.

Constraints

Constraints play a major role everywhere since it is the most important thing a farmer experiences within the process of production and marketing. The constraints perceived by the sample respondents in the production and marketing of millets were ranked using Garrett's ranking technique is given in Table 2. From the above table, it can be inferred that the major constraint faced by the farmer was the insufficient rainfall (71.72), since millets are grown mostly under the rain fed condition in the selected study, the lack of rainfall or the insufficient rainfall due to the monsoon failure may have an adverse effect on the production and the productivity of the millets. The succeeding constraints were the poor quality of seeds (63.12) so that the quality of seeds must be enhanced. The other constraints

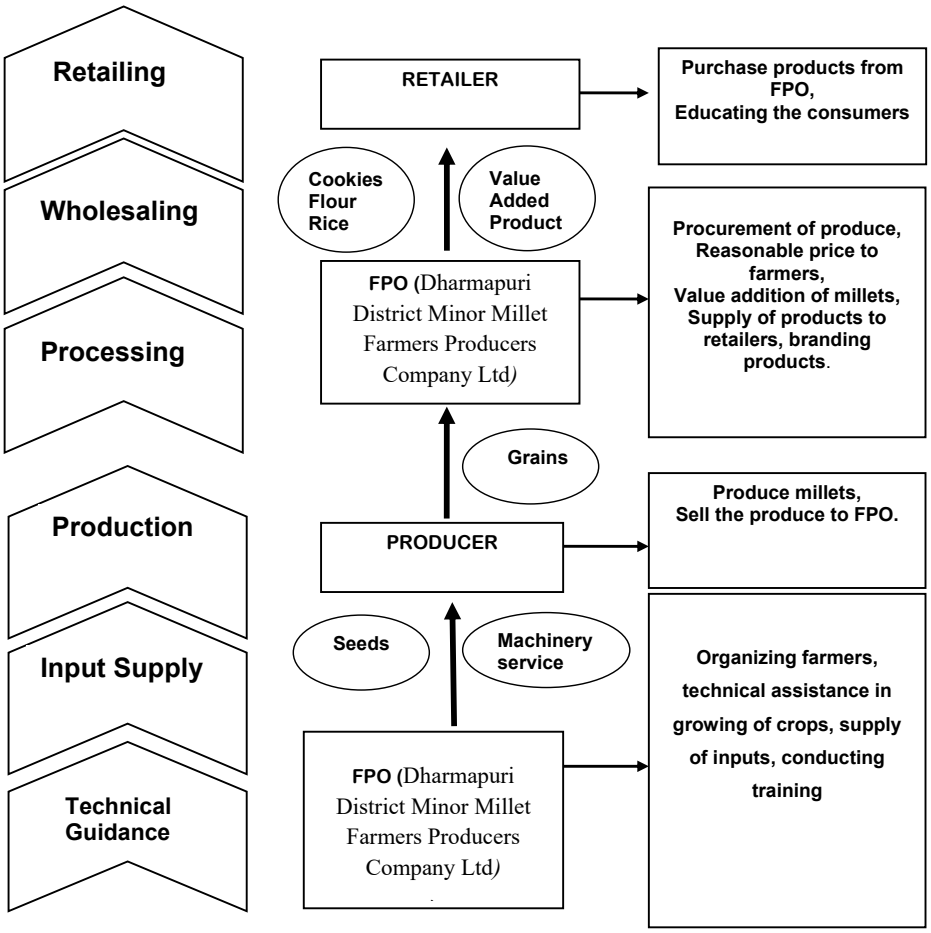

Figure 3. Value chain map of millets

were fluctuation of the price (51.90), Poor quality of Produce (46.02), Lack of finance (43.00), higher labour charge (41.58) and pest and disease (36.30).

CONCLUSION

Based on the results from the study, it was concluded that most of the respondents belonged to the category of above middle age groups' viz., 41 -60 years age which implies that above middle age groups are most likely to prefer farming. Most of the farmers are with basic primary education qualification and they are being involved in agriculture and its allied activities. The respondents are of small and marginal farmers with fragmented lands. The actors involved in the value chain of millets were farmers, Farmer Producer Organization and the retailers. The basic actor viz., farmers were involved only in the production function while the FPO activities include input supply to the farmers, technical guidance, procurement of the produce and wholesaling the value-added products under the brand "DMillets". The retailers were procuring the produce from FPO and retailing it to the consumers. While studying the constraints faced by the farmers, the major constraint was lack of rainfall due to the monsoon failure followed by the non-availability of the quality seeds. Hence by providing good quality seeds or ensuring the quality of seeds may address the constraint faced by the farmers.

REFERENCES

Markelova,H., Meinzen-Dick,R., Hellin,J., and Dohrn,S. (2009).Collective action for smallholder market access. *Food Policy.* **34(1)**; 1-7

Murray, E. V. (2008). Producer company model-current status and future outlook: opportunities for bank finance. *Financing Agriculture*, **40(4),** 18-26.

Nethravathi Ashok Patil *et al.,* (2015). Identifying the major players in the rasin sub-sector and mapping the supply chain,*Advance Research Journal of Social Science*,**6 (2**), 267-270

Trebbin, A. (2014). Linking small farmers to modern retail through producer organizations–Experiences with producer companies in India. *Food policy*, **45**, 35-44.

Valentinov,(2007). Why are co-operatives important in agriculture? An organizational economic perspective. *Journal of Institutional Economics*.**3 (1)**; 55-69

https://www.nabard.org