

## Economic impact of Farmer Producer Company on its members

Pradnyesh Deore<sup>1</sup>, M. K. Rathod<sup>2</sup> and Chhakuli Shelake<sup>3</sup>

1. & 3. Ex- PG students

2. Professor and Head of Extension Education Section

College of Agriculture, Nagpur 440001 (M.H.), India

Corresponding author's email: [pradnyeshdeore02@gmail.com](mailto:pradnyeshdeore02@gmail.com)

### ABSTRACT

*The present study on economic impact of Farmer Producer Company on its members was undertaken in Nashik district of North-Western region of Maharashtra state with sample size of 120 respondents from 2 Farmer Producer Companies. To study the economic impact, mean and per cent change was found out of pre and post participation of members. This per cent change was then considered for the extent of impact of each parameter. As regards to impact on economic status in which changes observed were, in employment generation 52.25 per cent and 'Z' value (9.58), in subsidiary occupation 43.12 per cent and 'Z' value (9.46), in annual income 61.27 per cent and 'Z' value (9.75), in annual expenditure 40.00 per cent and 'Z' value (7.24), and the change in annual savings were 81.56 per cent and 'Z' value (10.54). The overall mean economic impact of Farmer Producer Company on its members' pre and post participation was 55.64 per cent.*

*Keywords: Farmer Producer Company, Economic Impact, Member*

### INTRODUCTION

Agriculture and allied sector support livelihoods of 54.6 per cent of India's rural population and accounts for 17.1 per cent of the Gross Value Added for the year 2017-18 (DAC&FW 2018) and not only accounts for the overall growth of the economy but also for the reduction of poverty by providing food security to most of the population. For bringing industry and agriculture closer together, the Indian Government has initiated new organizational pattern in agriculture production and marketing to integrate large firms and encouraged the groups of small and marginal farmers who are the main manufactures of agricultural output and linked with the corporate buyers. Farmers Producer Organization (FPO'S) are collectivization of producers, especially small and marginal farmers; the producer organization has come out as one of the most is meant to offer efficient pathways to address the many challenges of agriculture, more significantly, improved investments, access to inputs, technologies and markets. The Department of Farmers Welfare and Agriculture Development, Ministry of Agriculture, Govt. of India, has identified Farmers Producer Organization (FPO) registered under the particular provisions of the Companies Act, 1956, as the most

appropriate institutional form around which to mobilize farmers and enhance their capacity to jointly leverage their production and selling effectiveness. An expert committee led by noted economist, Y. K. Alagh (2007) recommended, setting up of producer companies in 2002 by incorporating a new Act? Part IXA into the Companies Act of 1956. The objective of the committee was to frame a legislation that would enable incorporation of cooperatives in agriculture as producer companies and conversion of existing cooperatives into producer companies. The committee recommendation took care of ensuring the unique elements of cooperative business with a regulatory framework similar to that of companies.

Producer organizations have an important role to play in the current agricultural scenario given the increase in total land holdings as a result of increased fragmentation. Due to increased fragmentation and sub-division, farmers with marginal land holdings face a variety of issues relating to credit, market access, and technology adoption. This is a key rationale for the critical discussion around FPOs and their role in promoting sustainable agriculture, and forms a core part of the motivation (World Bank, 2008) focusing on 'Agriculture for Development' and suggests that for

small holders, producer organizations are essential to achieve competitiveness and, ultimately, their welfare. The main reason for forming the FPO is to deal with all the problems they are facing now and to improve their standard of living by making them to receive the exact price which was paid by the end user or customer by eliminating middle men. It is important to know the impact of FPOs on their sustainable economic development. The present study was conducted to know the impact of FPOs on sustainable economic development of members of the FPO. The results of the study highlighted the significant contribution of farmers towards developing the socio-economic conditions of farmers, thus making them self-sufficient and self-reliant. The study provided a reasonable understanding about the facilitating and inhibiting factors in functioning of these farmer organizations, and with suggestions to improve their efficiency and sustainability. The study throws some light on the underlying factors associated with efficiency of farmer producer companies. The study is expected to be helpful for the development agencies for effective formulation of strategies for initiation and up scaling of farmer organizations in other areas.

#### METHODOLOGY

The study was conducted in Nashik district of Maharashtra state. For the present study 2 major FPOs were selected from Niphad and Dindori tahsils as they adequately represent successful and

assessable case studies of producer companies. 1) Sahyadri Farmer Producer Company Ltd. which is the India's largest grape exporting company and India's largest tomato procuring group. The company also involved in processing activities covering a wide range of products such as fruit juice, ketchup, jam and jelly. 2) Om Gayatri Farmer Producer Company Ltd. which is also involved in manufacturing and wholesaling of fresh fruits and vegetables and this company is emerged as the successful company in raising nursery and its selling. To study the economic impact of FPOs on their members, 60 members from each FPO were purposively selected whose membership tenure in the company was minimum 3 years. Thus, a total of 120 members from the 2 FPOs constituted the sample of study. An ex post facto research design of social research was used for the present investigation. Survey method was followed for data collection; the data were collected through personal interview of respondents at their home and/ or farm. Economic impact of being a member of FPO was measured based on parameters, which included changes in employment generation, subsidiary occupation, employment generation, annual income and annual savings. By measuring all parameters of impact on economic status the overall economic impact was calculated. All the parameters and the overall economic impact were measured in per cent using the formula;

$$\text{Per cent change} = \frac{APscore - BPscore}{BPscore} \times 100$$

Where,

AP = Mean score of member after participation in FPC

BP = Mean score of member before participation in FPC

The overall economic impact of the FPO on its members was calculated by summing the score on five dimensions of economic impact and converting in to per cent change.

$$\text{Overall economic impact of FPC} = \frac{\sum DD1 + DD2 + \dots + DD5}{ND}$$

Where,

$\sum DD1 + DD2 + \dots + DD5 =$  Sum of per cent difference in five dimensions of impact.

ND = Number of dimensions

To test the significance of overall economic impact on before and after participation the mean score of FPO members was calculated by "Z test".

Z test is calculated by using following formula:

$$Z = \frac{|X1 - X2|}{\sqrt{\frac{S1^2}{n1} + \frac{S2^2}{n2}}}$$

Where,

X1 = Mean score of before participation in FPC

X2 = Mean score of after participation in FPC

S<sub>1</sub><sup>2</sup> = Standard deviation of before participation in FPC

S<sub>2</sub><sup>2</sup> = Standard deviation of after participation in FPC

n<sub>1</sub> = Sample size of before participation in FPC

n<sub>2</sub> = Sample size of after participation in FPC

The significance of calculated value is tested with table value of 0.01 to 0.05 level of probability at n<sub>1</sub>+ n<sub>2</sub>-2 degrees of freedom.

## RESULTS AND DISCUSSION

For calculating the economic impact of farmer producer company on its members, the mean of each indicator was calculated and the difference of before and after participation in FPO was worked

out to get the per cent change of that indicator. The per cent change was then considered for determining the extent of impact for the particular indicator. The results are as follows:

### 1. Change in Employment generation

Table 1  
Distribution of the respondents according to their level of change in employment generation

Sr. No.	Employment generation	Before (n=120)		After (n=120)		'Z' value
		Frequency	%	Frequency	%	
1	Low (Up to 131)	48	40.00	7	5.83	9.58**
2	Medium (132 to 260)	62	51.67	64	53.34	
3	High (261 and above)	10	8.33	49	40.83	
	Total	120	100.00	120	100.00	
		Mean = 155		Mean = 236		
	per cent Change in employment generation = 52.25					

\*\* Significant at 0.01 level of probability

From the Table 1 it is revealed that over half of the members (51.67%) were having medium level of employment generation, followed by 40.00 per cent and 8.33 per cent members found to have low and high level of employment generation, respectively before participation in FPO. The employment status changed to 53.84 per cent members with medium level of employment generation, followed by 40.83 per cent members having high level of employment generation and 5.83 per cent were belonged to low level of employment generation After participation in farmer producer company. Average man days

before participation was 155 days which increased to 236 days after participation. The per cent change in employment generation was 52.25 per cent, which shows highly significant ('Z' value 9.58), which shows the significant change in employment generation for members after participation in FPO.

The above findings clearly indicated that the FPO had a positive impact on employment opportunities for its members and thus contributed to the family income.

## 2. Change in subsidiary occupation

Table 2  
Distribution of the respondents according to their change in subsidiary occupation

Sr. No.	Subsidiary occupation	Respondents (n=120)				'Z' value
		Before		After		
		Frequency	%	Frequency	%	
1	Agriculture + labour	2	01.67	0	00.00	9.46**
2	Agriculture	63	52.50	22	18.33	
3	Agriculture + allied occupation	36	30.00	42	35.00	
4	Agriculture + business	10	8.33	30	25.00	
5	Agriculture + Service	9	07.50	26	21.67	
	Total	120	100.00	120	100.00	
	Mean score	2.67		3.81		
per cent change in subsidiary occupation = 43.12						

\*\* Significant at 0.01 level of probability

The data presented in Table 2 indicated that, before participation in FPO, about 52.50 per cent members were engaged in agriculture as their main occupation, followed by 30.00 per cent engaged in agriculture + allied occupation (such as dairy farming, goat farming, poultry) as supportive endeavour to farming; 8.33 per cent of them were engaged in agriculture + business, while 7.50 per cent were engaged in agriculture + service (both govt and private) and 1.67 per cent of them were engaged in agriculture + labour. After participation in FPO about 35.00 per cent members were engaged in agriculture + allied occupation (any new occupation has emerged?) as supportive endeavour to farming, followed by 25.00 per cent engaged in agriculture + business. About 21.67 per members were engaged in agriculture + service while 18.37

per cent of them remained engaged in agriculture as their main occupation. The per cent change of 43.12 per cent shows that there is significant change in subsidiary occupation of members after participation in FPO. Mean score of subsidiary occupation of after participation was 3.81 whereas, while it was 2.67 before participation, with a per cent change of 43.12, which was highly significant ('Z' value is 9.46).

From the above findings it was indicated that after participation in FPO majority of the members showed change in their subsidiary occupations. The reason might be the company helps to built management skills of business and other allied occupations. By conducting the various activities on post harvest management of grapes most of the members were get engaged in raisin

making from grapes and its selling which enables to them get good price for it and helps to prevent post harvest losses. And also most of the members

established their own nursery which enables them to get additional benefit along with agriculture.

### 3. Change in annual income

*Table 3*  
*Distribution of the respondents according to their level of change in annual income*

Sr. No.	Annual income (in `)	Before (n=120)		After (n=120)		'Z' value
		Frequency	%	Frequency	%	
1	Low (Up to 3,79,777)	43	35.83	5	4.17	9.75**
2	Medium (3,79,778 to 8,08,055)	70	58.34	78	65.00	
3	High (8,08,056 and above)	7	5.83	37	30.83	
Total		120	100.00	120	100.00	
		Mean = 4,54,625		Mean = 7,33,208		
per cent change in annual income = 61.27						

\*\* Significant at 0.01 level of probability

From the Table 3 it is revealed that 58.34 per cent of members were having medium income, 35.83 per cent low income followed by 5.83 per cent high incomes before participation in FPO. The scenario changed after participation in FPO; around 65 per cent of the members had medium of income, 30.83 per cent were having high level of income whereas only 4.17 per cent of members were in low income level. The mean annual income of members after participation increased to ` 7,33,208 whereas, before participation, it was ` 4,54,625 with a per cent change of 61.27, which was highly significant ('Z' value is 9.75).

From the findings it could be concluded that the participation in FPO had assured impact on the members' increase in income levels. The reason behind it hat the FPO generated additional employment, offered opportunities of engaging in other subsidiary occupations apart from helping FPO member-farmers to get good price for their produce and by improving their access to quality inputs at lower prices on account of collective action thus resulting in increased income levels of the members.

### 4. Change in annual expenditure

*Table 4*  
*Distribution of respondents according to their level of change in annual expenditure*

Sr. No.	Annual expenditure (in `)	Before (n=120)		After (n=120)		'Z' value
		Frequency	%	Frequency	%	
1	Low (Up to 1,72,315)	29	24.17	6	5.00	7.24**
2	Medium (1,72,316 to 3,60,185)	81	67.50	84	70.00	
3	High (3,60,186 and above)	10	8.33	30	25.00	
Total		120	100.00	120	100.00	
		Mean = 2,21,875		Mean = 3,10,625		
per cent change in annual expenditure = 40.00						

\*\* Significant at 0.01 level of probability

The Table 4 revealed that around 67.50 per cent of the members were having medium level of annual expenditure, 24.17 per cent low level of annual expenditure and 8.33 per cent had high level of annual expenditure before participation in FPO. The incomes increased to medium level of annual expenditure to around 75.00 per cent of members, 25.00 per cent members having high level of annual expenditure and only 5.00 per cent of members belonging to low annual expenditure level after participation in FPO. The mean annual expenditure, after participation, was ₹ 3,10,625 and it was

₹ 2,21,875 for before participation, with a per cent change difference of 40.00, which was highly significant ('Z' value is 7.24).

From the above findings it was concluded that a substantial impact of FPO could be noticed on their members as far as the expenditure on farm, home assets and other expenditure was concerned, which enables them to earn additional income and thus afford purchase of household consumption needs, farm implements and meet other demands.

5. Change in annual savings

Table 5  
Distribution of the respondents according to their level of change in annual savings

Sr. No.	Annual savings (in ₹)	Before (n=120)		After (n=120)		'Z' value
		Frequency	%	Frequency	%	
1	Low (Up to 1,95,448)	24	20.00	2	1.67	10.54**
2	Medium (1,95,449 to 4,59,884)	88	73.33	52	43.33	
3	High (4,59,885 and above)	8	6.67	66	55.00	
	Total	120	100.00	120	100.00	
		Mean = 2,32,750		Mean = 4,22,583		
	per cent change in annual savings = 81.56					

\*\* Significant at 0.01 level of probability

The Table 5 revealed that around 73.33 per cent of the members belonged to medium level of annual savings, followed by 20.00 per cent having low level of annual savings, while 6.67 per cent had high level of annual savings before participation in FPO. After participation in FPO greater number of members (66, 55.00%) were having high level of annual savings, followed by 43.33 per cent having medium level of annual savings whereas a mere 1.76 per cent of members had low level of annual savings. The mean annual savings of members, after participation on the other hand, was ₹ 4,22,583 whereas, before participation the mean annual savings was ₹ 2,32,750 with a per cent change of 81.56, proving to be highly significant ('Z' value is 10.54).

savings after becoming member of FPO. The reason might be that the FPO helped to improve the production and income of the members. The FPO also provided low-cost inputs and technologies to members leading to reduced expenditure of members and it helping to increase the saving of members of FPOs.

Overall economic impact of FPC

The overall mean difference between after participation and before participation in FPO was 55.64 per cent. It meant the overall economic impact of FPO on its members in terms of impact on economic status was around 56 per cent. Thus, it could be clearly stated that the FPO had positive and significant impact on its members. These findings are in conformity with the findings of Ahire *et al.* (2015) and Chopade (2019) as they also found there was a positive and significant impact of CIGs and FPOs on

It may be concluded that most of the members of FPO had satisfactory increment in

members respectively.

### CONCLUSIONS

The study revealed that the economic impact of FPOw as positive and significant on the economic status of its members. The existing positive impact of farmers towards FPOs need to be harnessed by increasing their participation in FPO through increasing the membership of existing FPOs and establishing new FPOs. The participation in FPOs leads to improvement in employment, income, consumption expenditure, investment on productive assets and a reduction in indebtedness. The present study found that the farmers of the

Nashik district have taken a forward step to reduce their problems by reintegrating themselves through FPOs. They achieved certain goals in the direction of value addition and increased market opportunities. Thus, state agriculture department should conduct awareness campaign on the concept of FPO and give wide publicity of such type of successful FPOs. Well-run and stable producer companies have the potential to improve farmer's income, reduce their exposure to risk and contribute to economic empowerment. Due to increase in income, savings and employment opportunities the members of FPOs could enjoy better economic status in the community.

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