Socio-Economic Impact of Farmer Producer Company on its Members

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Abstract

The present study on the socio-economic impact of Farmer Producer Company on its members was undertaken in Nashik district of North-Western region of Maharashtra state with a sample size of 120 respondents from two Farmer Producer Companies. Mean and percentage change was calculated as pre and post participation of members in the FPOs. This percentage change was then considered for the extent of impact of each parameter. As regards the impact on social status, the changes observed were in the self-confidence of FPO members which was 40.87 per cent and 'Z' value (11.45), in interaction with officials it was 56.68 per cent and 'Z' value (9.11), in communication skills 56.25 per cent and 'Z' value (10.45) and the change in social participation was 53.59 per cent and 'Z' value (8.08). As regards the impact on economic status, changes observed were in employment generation which was 52.25 per cent and 'Z' value (9.58), in subsidiary occupation it was 43.12 per cent and 'Z' value (9.46), in annual income it was 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 was 81.56 per cent and 'Z' value (10.54). Overall the mean impact of Farmer Producer Company on its members after participation, over pre participation was 54.01 per cent.

Keywords: Farmer Producer Company, Social status, Economic status, Impact, Members

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Introduction

Agriculture in India is predominantly production oriented, confined in a large number of fragmented small holdings and plays a pivotal role in the Indian economy. It provides employment to around 56 per cent of the Indian workforce, contributes to the overall growth of the economy and reduces poverty by providing employment and food security to the majority of the population. For bringing the industry and agriculture closer, the Indian Government has initiated a new organizational pattern in agricultural production and marketing to integrate large firms and encouraged the groups of small and marginal farmers who are the main manufacturers of agricultural output and linked with the corporate buyers.

Farmer Producer Organization (FPO) or collectivization of producers, especially small and marginal farmers into producer organizations has come out as one of the most efficient pathways to address the many challenges of agriculture, but more significantly, improved approach to investments, input, technology and markets. The Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India has identified Farmers Producer Organization registered under the particular provisions of the Companies Act, 1956 as the most appropriate institutional form around which to mobilize farmers and establish 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 Part IXA into the Companies Act of 1956. The objective of the committee was to frame a legislation that would enable the 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 landholdings as well as increased fragmentation. Due to increased fragmentation and sub-division, farmers with marginal landholdings 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. The World Development Report 2008 of the World Bank, focuses on 'Agriculture for Development' and suggests that for smallholders, producer organizations are essential to achieve competitiveness and ultimately improve their welfare.

This study was taken up to know the socio-economic impact of Farmer Producer Company on its members. The results of the study highlighted the significant contribution of farmers organization 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 the functioning of these farmer organizations, thereby coming out with suggestions to improve their efficiency and sustainability. The study could throw some light on underlying factors associated with the efficiency of farmer producer companies and will be helpful for development agencies for effective formulation of strategy for initiation and upscaling of farmer organizations in other areas.

Methodology

The study was conducted in Nashik district of Maharashtra state. For the present study, two 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. is India's largest grape exporting company and India's largest tomato procuring group. The company is 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. is also involved in the manufacturing and wholesaling of fresh fruits and vegetables. This company is emerging as a successful company in raising nursery and its sale. To study the impact of FPOs on their members, 60 members from each FPO, whose membership tenure in the company was a minimum of 3 years, were purposively selected. Thus a total of 120 members from the two FPOs constituted the sample of the 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 interviews of respondents at their homes and farm. The socio-economic impact of being a member of the FPO was measured based on parameters i.e. impact on social status which included change in self confidence, change in interaction with officials, change in communication skills and change in social participation. Impact on economic status included change in employment generation, change in subsidiary occupation, change in annual income and change in annual savings. The per cent change in different aspects of the respondents after participation in the FPO was computed by using the formula:

$$\text{Per cent change} = \frac{\text{AP score-BP score}}{\text{BP score}} \times 100$$

Where,

AP = Mean score of member after participation in FPC

BP = Mean score of member before participation in FPC

The overall socio-economic impact of the FPO on its members was calculated by summing the score on nine dimensions of impact and converting into per cent change.

$$\text{Overall impact of FPC} = \frac{\Sigma DD1+DD2\text{--------}+DD9}{ND}$$

Where,

ΣDD1+DD2--------+DD9 = Sum of per cent difference in nine dimensions of impact.

ND = Number of dimensions

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

Z test is calculated by using the following formula:

$$Z = \frac{|X1 - X2|}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

Where,

X1 = Mean score of before participation in FPC

X2 = Mean score of after participation in FPC

S_1^2 = Standard deviation of before participation in FPC

S_2^2 = Standard deviation of after participation in FPC

n_1 = Sample size of before participation in FPC

n_2 = Sample size of after participation in FPC

The significance of calculated value is tested with the table value of 0.01 to 0.05 level of probability at $n_1 + n_2 - 2$ degrees of freedom.

Results and Discussion

For calculating the socio-economic impact of FPOs on their members, the mean for each indicator was calculated and the mean difference 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.

It is depicted from Table 1 that regarding the impact on social status with respect to change in self confidence of members of FPOs, the mean score after participation was 3.47 whereas, that before participation was 2.46 and the per cent change recorded was 40.87 per cent over the pre participation.

The 'Z' value (11.45) depicted that there is significant difference in self confidence level of members after participation in FPO. In case of change in interaction with officials it has been noticed that the mean score after participation was 2.44 whereas, the score before participation was 1.55. Average per cent change in interaction with officials was 56.68 per cent as compared to before participation and 'Z' value of 9.11 indicated the significant difference in interaction with officials due to participation in FPO. The data on change in communication skills showed that the mean score after participation was 2.50 whereas, before participation it was 1.60 with per cent change of 56.25 per cent over pre participation as 'Z' value (10.45) depicted the significant difference in communication skills of the members. Regarding the change in social participation the mean score after participation was 6.75 whereas, that before participation was 4.4 with a per cent change of 53.59 per cent over pre participation. The 'Z' value of 8.08 showed a significant difference in the social participation of members after becoming members of FPO.

Table 1. Overall Socio-Economic Impact of Farmer Producer Company on its Members

S. No.	Particulars	Mean score		% change	Z Value
		Before	After		
A.	**Impact on social status**				
1	Change in self confidence	2.46	3.47	40.87	11.45**
2	Change in interaction with officials	1.55	2.44	56.68	9.11**
3	Change in communication skill	1.60	2.50	56.25	10.45**
4	Change in social participation	4.4	6.75	53.59	8.08**
B.	**Impact on economic status**				
1	Change in employment generation	155	236	52.25	9.58**
2	Change in subsidiary occupation	2.67	3.81	43.12	9.46**
3	Change in annual income	454625	733208	61.27	9.75**
4	Change in annual expenditure	221875	310625	40.00	7.24**
5	Change in annual savings	232750	422583	81.56	10.54**
	Overall impact of FPC			**54.01 %**	

*** Significant at 0.01 level of probability*

Table 1 also reveals the impact on the economic status. In case of change in employment generation the mean employment generation after participation was 236 days and before participation it was 155 days. The average per cent change of employment generation is 52.25 per cent as compared to before participation and 'Z' value is 9.58 which revealed the significant difference in employment generation of members of FPOs after participation. It is observed from the above table that the mean score change in the subsidiary occupation of members of FPOs after participation and before participation was 3.81 and 2.67 respectively and per cent change of 43.12 was recorded over pre participation as 'Z' value (9.46) depicted that there is a significant difference in the subsidiary occupation of the members after participation in FPO.

As regards the change in annual income, the mean annual income of members after participation was Rs. 7,33,208 whereas before participation mean annual income was Rs. 4,54,625. The average per cent change was 61.27 per cent as compared to before participation and 'Z' value 9.75 indicated that there is a significant difference in the annual income of members of FPOs after participation. In case of change in annual expenditure, mean annual expenditure after participation was Rs. 3,10,625 and before participation it was Rs. 2,21,875 and per cent change of 40.00 per cent was recorded over pre participation. The 'Z' value of 7.24 showed a significant difference in the annual expenditure of members after becoming members of FPO. As regards the change in annual savings, the mean annual savings of members after participation was Rs. 4,22,583 whereas before participation mean annual savings was Rs. 2,32,750. Average per cent change of 81.56 per cent was observed over pre participation and the 'Z' value of 10.54 depicted the significant difference in annual savings of members after participation in FFO. The overall mean difference between after participation and before participation in FPO was 54.01 per cent.

It means the overall impact of FPOs on its members in terms of impact on social status and impact on economic status was around 54 per cent. Thus, it could be definitely stated that the FPO had a positive and significant impact on its members. These findings are in conformity with the findings of Ahire and Kapse (2015) and Chopade (2019) as they also found a positive and significant impact of FPOs.

Table 2. Coefficient of Correlation of Selected Characteristics of Members of FPO and their Overall Impact

S. No.	Independent Variables	Overall impact (r value)
1	Age	-0.2600**
2	Education	0.2948**
3	Land holding	0.7452**
4	Cosmopoliteness	0.2573**
5	Extension contact	0.1839*
6	Innovativeness	0.2595**
7	Economic motivation	0.2552**
8	Risk orientation	0.2625**

*** Significant at 0.01 level of probability*

** Significant at 0.05 level of probability*

The data pertaining to correlation analysis are presented in Table 2. The correlation coefficients presented in Table 2 represent the relationship of independent variables with the overall impact of farmer producer company. It is depicted from the table that education, land holding, cosmopoliteness, innovativeness, economic motivation, risk orientation were having highly positive relationship with impact at 0.01 level of probability. Extension contact was found significantly correlated at 0.05 level of probability. Age had negatively significant relationship with the impact.

It is concluded that improving the education, cosmopoliteness, extension contact, innovativeness, economic motivation and risk orientation of young and middle aged members with more land holding will result in significant change in their socio-economic conditions. These findings are in conformity with the findings of Ahire and Kapse (2015) and Chopade (2019).

Conclusion

The results of the study revealed that, the FPOs had a positive and significant impact on change in social and economic status of the members. The existing positive impact on farmers needs to be harnessed by increasing their participation in FPOs through increasing the membership of existing FPOs and establishing new FPOs. Generally, small and marginal farmers who are relatively younger, educated and more informed have a great probability of participating in FPOs. It was observed from the study that FPOs have the dual responsibility of balancing social and economic objectives. Well-run and stable FPOs have the potential to improve farmer's income, reduce their exposure to risk and contribute to social and economic empowerment. If such type of companies are established in other areas within and outside Maharashtra, it will ultimately help to increase the socio-economic status of farmers.

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