

Socio - Economic Impact Assessment of Farms Produce Promotion Society (FAPRO) of Punjab

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ABSTRACT

The farmer organizations can serve as a potential alternative to improve the socio-economic condition of the farmers. The present study was conducted in Farms Produce Promotion Society (FAPRO) in Hoshiarpur of Punjab. Data were collected from the 50 members and 50 non-members selected randomly from the study area. The study revealed that membership in the organisation directly affected the socio-economic conditions of the people in the study area. It was found that income and employment of the members of the organisation were significantly higher in comparison to the non-members. A significant difference between the members and non-members was also observed in terms of food security and social empowerment.

Keywords: *FAPRO; Income; Employment; Food security; Habitat security; Social empowerment;*

Small and marginal farmers constitute the largest group of cultivators in Indian agriculture; 85 per cent of operated holdings are smaller than or about two hectares and amongst these holdings, 66 per cent are less than one hectare (Singh, 2012). One of the most important problems associated with small and marginal farmers is their small scale of operations. They require agricultural inputs in small quantities, which they procure from local traders at a price 20-30 per cent higher than the market rate. Transporting small quantities of produce to urban markets is not viable and they therefore end up selling their produce, particularly perishable commodities to local traders at markedly lower prices (Hegde, 2010). In absence of collectivization, the small scale of operations significantly reduces bargaining power in input procurement as well as sale of output (Kirsten and Sartorius, 2002).

Small Farmers' Organizations such as cooperatives and FPOs are expected to enhance incomes, reduce costs of input purchases along with transaction costs, create opportunities for involvement in value-addition including processing, distribution and marketing and enhance bargaining power (Agarwal, 2010).

Farmer organisations are effective institutional mechanism in providing their members with better access to research, extension, inputs and marketing (Gra *et.al.*, 1989). Collective action results in increased efficiency in the production, economics of scale, risk sharing, enhanced market integration with input and output markets and increased bargaining power. They are key to building sustainable livelihoods, i.e. adequate and sustainable access to income and resources to meet the basic needs (including adequate access to food, water, health facilities, educational opportunities, housing and time for community participation and social integration), which is a clear indication of positive social impacts of joining the organisation. Farmers' organisations have been able to ensure the empowerment of their members. When farmers come together, they see it as an opportunity to socialize, share and learn. Thus, farmer organisations can provide important platforms for capacity building, information exchange, and innovation in rural settings (Bingen *et al.* 2003). In this context, the present study was undertaken to assess the socio-economic impact of farmers' organisation on the livelihood of farmers.

METHODOLOGY

The study was conducted in the organisation FAPRO in block Bhunga, Hoshiarpur district of Punjab. Fifty members of FAPRO and fifty non-members who were not associated with FAPRO were selected by simple random sampling. To determine the economic impacts of joining the organisation, the members of the organization were asked to provide information about their production in quintals, employment generated in number of days, annual income earned in rupees per year, total annual savings in rupees saved per year, possession of assets in terms of the total monetary value of all the assets possessed (MB plough, sprayer, hoe, tractor, cultivator, etc), investment pattern in terms of rupees invested per enterprise annually. The information on the above variables was also collected from the non-members in order to aid comparison. The production, income and employment figures were taken for turmeric. The data obtained from the members and non-members of the study area were analysed using the t-test in order to find whether the difference between them was significant or not.

In order to assess the social impacts on the livelihood of respondents due to participation in the organisation, data were collected from the members and non-members on a set of statements listed under individual categories of food security, habitat security, educational security, health security and social empowerment. For habitat security, educational security and health security; frequency and percentage analysis was carried out. Wilcoxon Mann Whitney U test was used to find out if there is a significant difference between the mean rank of food security and social empowerment obtained for both the members and non-members of the study area.

RESULTS AND DISCUSSION

The economic and social impacts were measured under various heads as follows:

Measurement of the economic impact of FAPRO

Income of respondents from turmeric cultivation: The income for members and non-members was Rs 3.7 lakhs and Rs. 1.7 lakhs respectively. From Table 1, the higher income generating capacity of the members was clearly evident, which was the outcome of the efficient production and direct marketing of their produce through established outlets.

Table 1: Av. income of respondents from turmeric (N= 100)

Group	Mean (l)	SD	SE	t value
Members of FAPRO	3.7767	.35689	.06516	25.93*
Non- Members	1.7633	.23116	.04220	

*Significant at 5% level of significance

Production of turmeric of the respondents : From Table 2, it was clear that the average production (164 q) for the members of FAPRO was higher than the non-members' production (97 q). It indicated higher production capacity of the FAPRO members, which was a result of access to timely and quality inputs and extension support provided by the organisation.

Table 2: Av. production of turmeric of the respondents

Group	Mean (q)	SD	SE	t value
Members of FAPRO	164.5000	33.61419	6.13708	9.59*
Non- Members	97.3667	18.36880	3.35367	

*Significant at 5% level of significance

Employment of respondents from turmeric cultivation: The members of FAPRO were employed for 180 days per year on an average whereas the non-members could find 130 days of employment from cultivation of turmeric. It is clear from Table 3 that the higher employment generation capacity of FAPRO is significant.

Table 3: Average employment of respondents from turmeric cultivation (N= 100)

Group	Mean (days)	SD	SE	t value
Members of FAPRO	181.6667	24.50663	4.47428	7.39*
Non- Members	131.6667	27.80267	5.07605	

*Significant at 5% level of significance

Table 4: Average savings of respondents generated from turmeric cultivation (N= 100)

Group	Mean (Rs)	SD	SE	t-value
Members of FAPRO	36.0000	6.61764	1.20821	14.21*
Non- Members	16.9333	3.19410	.58316	

*Significant at 5% level of significance

Savings of respondents generated from turmeric cultivation: Members saved up to Rs 36,000 per annum whereas the non-members saved up to Rs 16,000 only. Table 4 indicates significant difference in the average savings of members as compared to non-members.

Assets owned by the members of FAPRO and the non-members: The average worth of assets owned (rupees

in thousands) by the FAPRO members and non-members is shown in the Table 5. It is clearly evident that the members possessed more assets as compared to the non-members.

Table 5: Average worth of assets owned by respondents

Group	Mean (Rs)	SD	SE	t value
FAPRO Members	144.0000	121.82095	22.24136	5.49*
Non- Members	21.8333	3.59198	.65580	

*Significant at 5% level of significance

Investment in various enterprises by the respondents:

Table 6 represents the average investment (rupees in thousands) made by the FAPRO members and non-members in various enterprises. It is clearly evident that there was significant difference in the average investment made by the members as compared to non-members. The members possessed higher capacity to invest in various enterprises, in comparison to the non-members, which is due to the higher income earned by the member farmers.

Table 6: Average investment capacity of respondents in various enterprises (N= 100)

Group	Mean (Rs)	SD	SE	t value
Members of FAPRO	27.6667	9.35261	1.70754	7.57*
Non- Members	13.4333	4.29662	.78445	

*Significant at 5% level of significance

Measurement of the social impact of FAPRO : The social impact on the livelihoods of people in the study area was inferred by gathering information from all the respondents on the basis of present level of security in terms of food, habitat, education, health and the level of social empowerment.

Table 7: Level of food security of the respondents based on Wilcoxon-Mann-Whitney test (N=100)

Food Security	Mean Rank	Z value
Members	41.00	-5.504*
Non members	20.00	

*Significant at 5% level of significance

Food security of the respondents : The responses of members and non-members were taken on the structured schedule, coded and analysed using Wilcoxon-Mann-Whitney U nonparametric test in order to identify the significance of difference between member and non-member farmers in case of food security. Table 7 indicates that there was significant difference in terms

of food security between the control and the experimental group.

Habitat security of the respondents: There was no difference among the members of FAPRO and non-members in case of availability of electric supply, water supply and toilet facilities in house, since these were common facilities in the villages. In case of dwelling, all the members were found to reside in owned houses, unlike the non-members, among whom 11 percent still dwelled in rented houses, as evident form Table 8.

Table 8: Distribution of respondents according their habitat security (N=100)

Habitat security	Status	Members		Non-members	
		No.	%	No.	%
Dwelling	Owned	50	100	39	78
	Rented	0	0	11	22
Housing type	Pucca	50	100	45	90
	Kaccha	0	0	5	10
Toilet facilities	Yes	50	100	50	100
	No	0	0	0	0
Electric supply	Yes	50	100	50	100
	No	0	0	0	0
Water supply	Yes	50	100	50	100
	No	0	0	0	0
Vehicles	Yes	50	100	42	84
	No	0	0	8	16

Educational security of the respondents: Almost all children of the FAPRO members got college education but only 56 per cent of non-members' children got the same. Table 9 depicts that 80 per cent members participated in functional literacy programme but the figure for the same in case of non-members was only 20 per cent.

Health security of the respondents: The members' and non-members' responses on the schedule were collected and then, frequency and percentage analysis was done. The table below (Table 10) shows that there was not much difference between the members of FAPRO and the non-members.

Social empowerment of the respondents : The obtained responses of members and non-members were rated and analysed using Wilcoxon-Mann-Whitney's U test in order to identify the significance of difference between member and non-member farmers in case of social empowerment. The following table (Table 11) indicates that there was significant difference in case of social empowerment between the control and the experimental groups in the study area.

Table 9: Distribution of respondents according their educational security (N= 100)

Statements		Members		Non-members	
		No.	%	No.	%
Access to information regarding education opportunities for children	Yes	50	100	43	86
	No	0	0	7	14
Children sent to public/ convent/ English medium schools	Yes	50	100	39	78
	No	0	0	11	22
Children got collegiate education	Yes	50	100	28	56
	No	0	0	22	44
Children sent to nearby town or cities for education	Yes	50	100	40	80
	No	0	0	10	20
Adults from your family participate in functional literacy programme	Yes	40	80	10	20
	No	10	20	40	80
Children had to stop their studies due to high cost & unaffordability	Yes	0	0	6	12
	No	50	100	44	88

Table 10: Distribution of respondents according their health security (N= 100)

Statements		Members		Non-members	
		No.	%	No.	%
We depend only on local hospital for all our health problems	Agree	0	0	7	14
	Disagree	50	100	43	86
We travel to outside town in order to get better health services	Agree	50	100	45	90
	Disagree	0	0	5	10
We can't afford the health care facilities available	Agree	0	0	4	8
	Disagree	50	100	46	92

Table 11: Level of social empowerment of the respondents as per Wilcoxon-Mann-Whitney test (N=100)

Category	Social empowerment (Mean Rank)	Z value
Member	45.50	-6.681*
Non-member	15.50	

*Significant at 5% level of significance

The FAPRO members produced on an average 164 quintals per year whereas the non-members produced only 97 quintals of raw turmeric. The study by *Ojiagu et.al.(2015)* also revealed the positive effect of cooperatives in rural Anambra state, Nigeria as perceived by the farmer members in respect of such economic benefits as increase in their income level, increase in their agricultural productivity, and access to quality input, credit access without collateral and better price obtained through value addition (processing) of their farm products. Membership to such organizations is considered to increase the level of agricultural production and yield economic benefit to farmers as well as promote their general welfare (*Oyeyinka et al., 2009; Mwaura, 2014*). A wide difference between the incomes of members and non-members was

observed. The income from the turmeric produce for FAPRO members and non-members accrued to 3.7 lakhs rupees and 1.7 lakhs rupees respectively. *Sakthi et.al.* also reported that the members of TAMAFED (Tamil Nadu Mango Growers Federation) in Tamil Nadu gained social and economic benefits and the costs incurred on input and output transactions were quite low ultimately adding to the benefit. There is a positive effect on small-scale farmers' income from being member in a farmers' organization (*Bachke, 2009*). *Tolno et.al.* investigated the sample of 90 smallholder potato producers in Middle Guinea and found positive farm income effects of group membership. The FAPRO members got employment (181 days) for more number of days as compared to the non-members (131 days). A significant difference between the members and non-members was observed in terms of food security and social empowerment. *Swanson (2008), Rondot and Collion (2001)* also found similar result that farmers' organizations can be very effective in meeting the genuine needs of the rural communities to support farmers and represent their interests in decision-making

processes. This matches with the findings of Armando(2009) who found that the cooperatives and farmer organisations increased financial security for the members, and contributed directly and indirectly to gender equality. But there was not much difference between the members and non-members in Punjab in terms of habitat, health and educational security. The results were in confirmation with the findings of Nandeesa et.al. (2013) who reported that the Muttalur farmers of Nallavur Farmers Producers Organization, Chennai could increase their share in the consumer price by resolving issues of trader exploitation, exploring new markets, accessing timely credit and quality inputs. The FPO members decided to tap the export market at Chennai and were able to get Rs. 1700/bag against the local rates of Rs. 900/bag.

CONCLUSION

The membership in organisation was found to be directly affecting the socio-economic conditions of the people in the study area. It was found that income and employment for the members were significantly higher in comparison to the non-members. A significant difference between the members and non-members was also observed in terms of food security and social empowerment. Thus, this justifies the proposition that the membership in organisation can directly affect the socio-economic status of an individual positively. This results in economic betterment and social upliftment of the farmers in particular and the country in general. Thus, this model should be replicated in other parts of the country.

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