

## Communication Behavior Analysis of the Member Farmers of Farmer Producer Organizations (FPOs)

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(Received 15 December 2021, Accepted 21 February, 2022)

(Published by Research Trend, Website: [www.researchtrend.net](http://www.researchtrend.net))

**ABSTRACT:** Farmer Producer Organization (FPOs) play an important role in organizing small and marginal farmers into group which will increase their marketing efficiency. Communication behavior of the farmers plays an important role in getting access to new technology, market information, appropriate solution of farm problems etc. so, by considering these points to know the communication behavior of the farmers and the factors contributing it the present study was undertaken in Kalahandi and Cuttack district of Odisha. Total 6 FPOs were selected, 4 from Kalahandi district and 2 from Cuttack district and 5 per cent framers of the total member were selected by following proportionate random sampling method and in this way total 186 farmers were selected for the study. Ex-post facto research design was followed. From the study it was revealed that majority farmers were found to have high level of extension agent contact (51.07 per cent) and medium level of mass media contact (55.92 per cent) after joining the FPOs and there was 22 per cent and 32 per cent increase in contact with extension agent and mass media respectively. And it was also found that family type, housing type, market orientation shows a significance relation at 0.01 level and family size, participation in FPOs, risk orientation significant relation at 0.05 level with extension agent contact. Similarly, education, housing type, risk orientation and market orientation shows a significance relation with mass media contact at 0.01 level. So from the study we may conclude that FPOs plays a significant role in increasing the communication behavior of the farmer by increasing the contact with extension agent and mass media.

**Keywords:** Proportionate random sampling, Ex-post facto research design, Mass media, Risk orientation, Market orientation.

### INTRODUCTION

FPOs are collective enterprises set up by farmers (mainly rural producers) to enable a better connection between the market and rural agricultural products. The main aim of the Farmer Producer Organization (FPOs) is to ensure a better income for the producers through an organization of their own. In India about 86.08 per cent of the total land holding owned by the small and marginal farmers and their number shows a raising trend in each year due to continuous fragmentation of land (Census report 2015-16). And

these section of the farming society do not have the volume individually to get the benefit of economies of scale. In agricultural marketing there is a chain of intermediaries, who often work non-transparently leading to the situation, where producer receives only a small part of the value, which the ultimate consumer pays. So to eliminate this situation we need to accumulate the primary producers in to producer organization. This concept was first put forth by a panel of expert led by Y.K. Alagh, and by following his recommendation center has introduced the farmer

producer companies in the company's act, 1956 (Kakati and Roy, 2018). Farmers Producers have better bargaining power in the form of bulk buyers of produce and bulk suppliers of inputs.

Agriculture is becoming increasingly information sensitive; hence, access to information has become a pre-requisite and a valuable resource for agricultural development (Rodman, 2006). For the farmers for getting benefit from a new technology, must have access to it and learn how effectively utilize in their own farming practice. This is the function of all the extension agencies working in whole world. And in this both extension agencies and mass media plays a tremendous role in access and transfer of need based agricultural technology. So by seeing the importance of these two source of information transfer to the farming society the present study was under taken with the objective of "to study the communication behavior of the member farmers of Farmer Producer Organization (FPOs)."

## METHODOLOGY

The present study was conducted in two district of Odisha chosen randomly one was Kalahandi and another one was Cuttack. Out of 32 FPOs, 4FPOs from Kalahandi district and out of 14 FPOs, 2 FPOs from Cuttack district were selected and from each FPOs 5 per cent member farmers were selected in proportionate random sampling method and in this way from 6 FPOs, 186 farmers were selected for the study. Data was collect with the help of well-structured pre tested interview schedule and the ex-post facto research design was followed for the analysis of data. The communication behavior of the farmers studied by analyzing two variables that was contact with extension agent and mass media contact. The percentage change in contact in case of above two variables was also calculated by following the formula as followed by Chopade (2019).

Percentage change in contact with extension agent

$$= \frac{\text{MEAA} - \text{MEAB}}{\text{MEAB}} \times 100$$

Where, MEAA= Mean score of contact with extension agent after joining FPOs

MEAB=Mean score of contact with extension agent before joining FPOs

The formula is similar for the calculation of change in mass media contact.

## RESULT AND DISCUSSION

### A. Socio-economic profile of the member farmers of FPOs

The distribution of the farmers on the basis of the socio-economic profile presented in the Table 1. From the table it was revealed that majority of the farmers belonged to middle age category (60.22 per cent), having primary level of education (29.57 per cent), have nuclear type of family (53.76 per cent) of size up to 4 members (53.76 per cent), live in pucca house (61.29 per cent) and majority (54.30 per cent) were male and 45.70 per cent were female members.Regarding land under cultivation majority (45.71 per cent) had up to 2.5 acre of land followed by 3.64 per cent in between 2.6 to 5 acre of land under cultivation. In case of occupation majority were involved in agriculture along with horticulture (51.61 per cent) and get annual income in between 50,001 to 1 lakh (60.22 per cent).The finding similar with the findings of Barman *et al.* (2021).

Towards participation of the farmers in different FPOs activities majority (62.37 per cent) had medium level (score between 10 to 13) of participation followed by 19.89 per cent and 17.74 per cent farmers had low (score up to 9) and high level (score more than 13) of participation respectively. Regarding economic motivation majority (60.76 per cent) had medium level (score between 17 to 22) motivation followed by low (score up to 16) (24.19 per cent) and high level (score more than 22) (15.05 per cent) of motivation. For risk orientation majority (60.21per cent) had medium level (score between 14 to 22) of risk followed by low (score up to 13) (23.12 per cent) and high (score more than 22) (16.67 per cent) risk orientation. And for market orientation 55.91 per cent had medium level (score between 19 to 25) and 23.12 per cent and 21.97 per cent had low (score up to 18) and high level (score more than 25) of market orientation respectively.

**Table 1: Distribution of the member farmers on the basis of their socio-economic profile (N=186).**

Sr. No.	Categories	Frequency	Percentage
1.	<b>Age</b>		
	Young Age (up to 30 years)	38	20.43
	Middle Age ( Between 31 to 53 years)	112	60.22
	Old Age (Above 53 years)	36	19.35
2.	<b>Education</b>		
	Illiterate	22	11.83
	Can read only	2	1.07
	Can read and write	19	10.21
	Primary	55	29.57
	Middle	24	12.90
	High school	37	19.89

	Graduate and above	27	14.53
3.	<b>Family type</b>		
	Nuclear	100	53.76
	Joint	86	46.24
4.	<b>Family Size</b>		
	Small size (up to 4 members)	100	53.76
	Medium size (between 5 to 6 members)	52	27.96
	Large size ( more than 6 members)	34	18.28
5.	<b>Housing type</b>		
	Kuchha	72	38.71
	Pucca	114	61.29
6.	<b>Gender</b>		
	Male	101	54.30
	Female	85	45.70
7.	<b>Area under cultivation</b>		
	Small (up to 2.5 acre)	85	45.71
	Medium( between 2.6 to 5 acre)	57	30.64
	Large (more than 5 acre)	44	23.65
8.	<b>Occupation</b>		
	Agriculture only	31	16.67
	Agriculture + Labour	26	13.98
	Agriculture + Animal husbandry	12	6.45
	Agriculture + Horticulture	96	51.61
	Agriculture + Mushroom Cultivation	5	2.69
	Agriculture + Business	8	4.30
	Agriculture + Service	8	4.30
9.	<b>Income</b>		
	Low (up to Rs. 50,000)	25	13.44
	Medium (in betweenRs. 50,001 to Rs.100000)	112	60.22
	High (more than 100000)	49	26.34
10.	<b>Farmers participation in FPOs</b>		
	Low (up to score 9)	37	19.89
	Medium (between 10 to 13)	116	62.37
	High (above 13)	33	17.74
11.	<b>Economic motivation</b>		
	Low (up to score 16)	45	24.19
	Medium (between 17 to 22)	113	60.76
	High (above 22)	28	15.05
12.	<b>Risk orientation</b>		
	Low (up to score 13)	43	23.12
	Medium (between 14 to 22)	112	60.21
	High (above 22)	31	16.67
13.	<b>Market Orientation</b>		
	Low (up to score 18)	43	23.12
	Medium (between 19 to 25)	104	55.91
	High (above 25)	39	21.97

### B. Communication behavior of the member farmers of FPOs

The distribution of the farmers on the basis of extension agent contact and mass media contact before and after joining the FPOs presented in the Table 2. From the table it was realized that in case of contact with extension agent, before joining the FPOs majority (59.14 per cent) had medium level (in between score 15 to 20)of extension agent contact followed by 26.88 per cent had low (less than score 15) and 1.98 per cent had high level (more than score 20)of extension agent contact. However, after joining FPOs majority (51.07 per cent) had high level (more than score 20)of extension agent contact followed by 44.09 per cent had medium (in between score 15 to 20) and very less 4.84

per cent had low level (less than score 15)of extension agent contact. It was also found that due to FPOs there was 22 per cent increase in overall contact of the farmers.

Regarding mass media contact before joining the FPOs majority (54.84 per cent) of the farmers had low level (up to score 6) of contact followed by 36.56 per cent had medium (in between score 7 to 12) and remaining 8.60 per cent had high level (more than score 12) of mass media contact. However, after joining FPOs 32 per cent increase in contact was realized and majority (55.92 per cent) had medium level (in between score 7 to 12) of mass media contact followed by 22.58 per cent had high (more than score 12) and 21.50 per cent had low level (up to score 6) of mass media contact.

**Table 2: Distribution of the farmers on the basis of extension agent contact and mass media contact before and after joining the FPOs (N=186).**

Sr. No.	Categories	Before joining FPO		After joining FPO		% change in participation
		F	%	F	%	
1.	<b>Contact with extension agents</b>					
1.	Low level of extension agent contact(less than score 15)	50	26.88	9	4.84	22
2.	Medium level extension agent contact (in between score 15 to 20)	110	59.14	82	44.09	
3.	High level of extension agent contact (more than score 20)	26	13.98	95	51.07	
B	<b>Contact with mass media</b>	F	%	F	%	
	Low level of mass media contact (up to score 6)	102	54.84	40	21.50	32
	Medium level extension agent contact (in between score 7 to 12)	68	36.56	104	55.92	
	High level of extension agent contact(more than score 12)	16	8.60	42	22.58	
	Total	186	100	186	100	

The Table 3 shows the data regarding the regress of different independent variables with extension agent contact and mass media contact of the member farmers of FPOs. Form the table it was revealed that in case of extension agent contact family type, housing type, market orientation shows a significance at 0.01 level and family size, participation in FPOs, risk orientation significance at 0.05 level. This means nuclear type of family, person with pucca house, small size family (up to 4 members), good participation in FPOs activities, have a good level of market orientation and good risk

taking ability had significant effect on the extension agent contact of the member farmers. Similar with the findings of Rahman *et al.* (2018).

With regard to mass media contact education, housing type, risk orientation and market orientation shows a significance at 0.01 level. So from this we can conclude person with good education level, good quality hose, good risk taking ability and good knowledge about the market had a significance relationship with the mass media contact of the farmers of FPOs.

**Table 3: Regression analysis of different independent variables with extension agent contact and mass media contact of the member farmers of FPOs. (N=186).**

Sr. No.	Variables	With extension agent contact	With mass media contact
		Regression coefficient	Regression coefficient
1.	Age	-0.006NS	-0.01NS
2.	Education	0.13NS	0.61*
3.	family type	2.49*	1.17NS
4.	Family size	-0.33**	-0.23NS
5.	Housing type	2.09*	1.53*
6.	Gender	-0.66NS	-0.87NS
7.	Land under cultivation	0.10NS	0.20NS
8.	Occupation	0.06NS	0.001NS
9.	Annual income	-1.26NS	0.001NS
10.	Participation in FPO	0.35**	0.51NS
11.	Economic motivation	-0.02NS	0.05NS
12.	Risk orientation	0.13**	0.15*
13.	Market orientation	-0.21*	-0.18*
** significant at the 0.01 level, * significant at the 0.05 level NS= Non significant			

## CONCLUSION

In the study we found that majority of the farmers belonged to middle age category (between 31 to 53 years) had primary level of education, nuclear type family of up to 4 members, pucca housing type and majority were male member farmers. It was also found that majority farmers were small farmers of up to 2.5 acre of land holding, involve in agriculture and horticultural activities, getting annual income in between 50,001 to 1 lakh and medium level of

participation in FPOs, economic motivation, risk orientation, and market orientation activities. It was revealed that member farmers had a high level of extension agent contact and medium level of mass media contact and due to FPOs there was 22 and 33 per cent increase in contact with extension agent and mass media respectively. It was realized that family type, family size, housing type, participation in FPOs, risk orientation and market orientation had a significant effect with the extension agent contact. Similarly, education, housing type, risk orientation and market

orientation had a significant relationship with mass media contact of the farmers. So from the analysis we may conclude that collectivization of the farmers into FPOs reduced the gap in getting proper, timely and innovative information technology to the farmers.

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**How to cite this article:** Subha Laxmi Sahoo, Sarbani Das, Bibhuti Prasad Mohapatra, Biswajit Sahoo and Abhiram Dash (2022). Communication Behavior Analysis of the Member Farmers of Farmer Producer Organizations (FPOs). *Biological Forum – An International Journal*, 14(1): 1656-1660.