



## Research Article

# PROFILE CHARACTERISTICS OF MEMBERS OF FARMER PRODUCER ORGANIZATIONS (FPOs)

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Received: December 01, 2020; Revised: December 12, 2020; Accepted: December 13, 2020; Published: December 15, 2020

**Abstract:** The study was conducted in purposively selected Mysuru district of Karnataka state because largest number of crop specific FPOs (10 FPOs) are operating in the district out of 182 FPOs in Karnataka state. The two organisations Varuna Horticulture Farmer Producer Company Limited (VHFPC) and Arkeshwara Horticulture Farmer Producer Company Limited (AHFPC) were purposively selected. The respondents for the study were the members in the organisations. The list of organisational members was taken from each organisation growing Banana and Tomato crop thus 60 respondents were selected by simple random sampling technique. Thus, a total of 120 member farmers were selected for the study. Ex-post-facto research design was used for the present study. The collected data was analyzed using mean, frequency, standard deviation, With respect to the personal characteristic of VHFPC members, it was found that majority half (70.00 %) of them belonged to middle age group, had high school education (35.00 %) and belonged to medium sized family (45.00 %) further they had low farming experience (38.33 %), and belonged to big farmers (60.00 %) category. With respect to the personal characteristic of AHFPC members it was found that over half (56.67 %) of them belonged to young age group, had high school education (33.33 %), belonged to medium sized family (65.00 %), had low farming experience (45.00 %), and belonged to small farmers (46.67 %).

**Keywords:** Farmer Producer Organizations, Personal, Psychological variables, Communication variable

**Citation:** S. Dechamma, *et al.*, (2020) Profile Characteristics of Members of Farmer Producer Organizations (FPOs). International Journal of Agriculture Sciences, ISSN: 0975-3710 & E-ISSN: 0975-9107, Volume 12, Issue 23, pp.- 10422-10429.

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**Academic Editor / Reviewer:** Shanabhoga M B

## Introduction

Department of Agriculture and Co-operation under Ministry of Agriculture and Farmers Welfare, Govt. of India has identified 'FPOs' registered under the special provisions of the Companies Act, 1956 as the most appropriate institutional form around which the mobilization of farmers is to be made for building their capacity to collectively leverage their production and marketing strength. It creates sustainable linkages between FPOs and input suppliers, technology providers, extension and research agencies and marketing and processing firms both in public and private sectors [1].

Several institutional models of farmers have been tried in India to integrate farmers with the value chain, FPOs are found to be one such recent and effective model. Y.K. Alagh committee has recommended FPOs as a primary level organization to serve the interest of farming community; These FPOs are flexible incorporating the characteristics features of companies and also co-operative societies. As per the guidelines prepared by NABARD, FPOs in India can be promoted or registered in the country under Companies Act 1953 or even as a co-operative society under the concerned state co-operative societies act or the liberal co-operatives act enacted by few states in the country.

Besides, the area of operation of FPO is more than a state. It can be registered under multistate co-operative act 2002. Further as per the NABARD guidelines an FPO can also be registered under Indian trust act 1882. Hence sufficient provision has been made to promote and register FPOs under the provision of any act in the country. The following are the important features of FPOs.

FPO is a registered body and a legal entity.

FPOs are formed by a group of producers for either farm or non-farm activities.

Producers are shareholders in the organization.

FPOs deals with business activities related to the primary produce/product.

FPOs work for the benefit of the member producers.

A part of the profit is shared among the producers.

Rest of the surplus is added to its owned funds for business expansion.

## Material and Methods

The study was conducted in purposively selected Mysuru district of Karnataka state because largest number of crop specific FPOs (10 FPOs) are operating in the district out of 182 FPOs in Karnataka state. In the district Mysuru and K.R.Nagara taluks were selected purposively in order to bring a contrast between two areas showcasing the extremes, one representing the area most favourable for fruits i.e. Mysuru and the other, portraying the area with most favourable conditions for vegetables i.e. K.R.Nagara. The two organisations Varuna Horticulture Farmer Producer Company Limited (VHFPC) and Arkeshwara Horticulture Farmer Producer Company Limited (AHFPC) were purposively selected to assess the impact of farmer organisations as they adequately represent successful and assessable case studies of farmer organisations. In addition, both of them involve small and marginal farmers. The organisations are located in the Mysuru and K.R.Nagara taluk of Mysuru district. Thus, these two taluks were purposively selected.

## Selection of the respondents

In Mysuru taluk, Varuna village was selected purposively because the office of VHFPC was located in Varuna. Similarly, out of K.R.Nagara taluk in district of Mysuru, Hebbalu village was selected purposively because of the positioning of its main office in Hebbalu of the AHFPC.

### Selection of farmers

The respondents for the study were the members in the organisations. The list of organisational members was taken from each organisation growing Banana and Tomato crop thus 60 respondents were selected by simple random sampling technique. Thus, a total of 120 member farmers were selected for the study.

### Research design

Research design is the most important and crucial aspect of research methodology. Keeping in the view the nature of the study, ex-post facto research design was adopted for the study. This was considered as appropriate because the phenomenon has already occurred. Ex-post facto research design is a systematic empirical enquiry in which the researcher does not have direct control over independent variables, because their manifestation has already occurred or because they are inherently not manipulable and inferences about relationship among variables are made without direct intervention, from concomitant influence of independent variables on dependent variables [2].

### Result and discussion

#### Profile characteristics of farmer producer organizations members

The personal psychological and communication characteristics of members of two FPOs and the pooled sample were studied and quantified. The variables included for the study are age, education, family size, farming experience, land holding, achievement motivation, cosmopolitanness, decision making ability, scientific orientation, management orientation, economic motivation, risk orientation, innovative proneness, social participation, mass media exposure, participation in the activities of FPO, training received, extension contact and extension participation. The results are systematically presented in [Table-1] under separate headings.

#### Age

Age of the respondents shows maturity and thinking ability. It is visualized from the results presented in [Table-1] that majority (70.00 %) of the VHFPC members were belonging to middle age group, followed by young (20.00 %) and old age group (10.00 %). With respect to AHFPC members more than half (56.67 %) of the tomato growers were of young aged, followed by middle (40.00 %) and old age (3.33 %) category. The Pooled data revealed that over half (55.00 %) of the respondents belonged to middle age group followed by young (38.33 %) and old age (6.67 %) group. Usually, the middle-aged farmers are more enthusiastic and have great amount of responsibility as well as they are efficient compared to old and young farmers. Further, the respondents between 31 to 50-year age group have more physical vigor and more responsibility towards family than the young farmers. The results are in line with the findings of the study conducted by Gopala (2015) [3] and Shivani *et al.*, (2016) [4].

#### Education

Education of the individual determines their knowledge level and the mental status of the individual. Results pertaining to the education level of VHFPC members depicted that less than half (35.00 %) of them had high school education and nearly one fourth (18.33 %) of the VHFPC members had PUC level education, followed by JOC/ITI/Diploma level (16.67%) education. In case of AHFPC members, 33.33 percent of them were having high school level education. Whereas, 25.00 and 18.33 percent of them were having PUC level and JOC/ITI/Diploma level of education, respectively.

The pooled data of education status of the farmers revealed that a little more than one third (34.17 %) of the respondents were having upto middle school level of education followed by JOC/ITI/Diploma level (21.67 %) education.

Education helps to have fair amount of knowledge about the functioning of FPOs and its consequences. The result shows that awareness about FPOs will have greater impact in understanding level of the farmers. Even though the formal education of the respondents is low, their farming experience is medium which is necessary to know about impact of FPOs on yield and income and to adopt respective technologies to improve the same. The results are in line with the findings of the study conducted by Vinay Kumar (2008) [5] and Gopala (2015) [6].

### Family size

The [Table-1] shows that little less than half (45.00 %) each of the VHFPC members were having medium and big sized family, followed by small (10.00 %) family. Similarly, more than half (65.00 %) of the AHFPC members were having medium sized family, followed by small (20.00 %) and big (15.00 %) family. The pooled data more than half of the respondents had medium sized (55.00 %) family, followed by big (30.00 %) and small sized (15.00 %) family.

In the present-day context the individuals are well aware of the importance of small and medium sized families. The role of government and NGOs in bringing awareness on farm technologies and also the efforts of the mass media might have contributed for the above trend. The disintegration of joint families due to social and financial reasons might have also contributed for the emergence of small and medium sized families. Besides the medium size families, which were having five to seven members may influence the collective decision-making ability of farmers. The results of the present study are in line with the findings of the study conducted Pat Bogue (2013) [7].

### Farming experience

The data in [Table-1] depicts that, 38.33 percent of the VHFPC members were having low level of farming experience, followed by medium (35.00 %) and high (26.67 %) level of farming experience. It can also be visualized from the table that 45.00 percent of the tomato growers were having low level of farming experience, followed by medium level (36.67 %) and high level (18.33 %) of farming experience.

Nearly half (47.50 %) of the respondents were having medium level farming experience, followed by low (30.00 %) and high (22.50 %) level of farming experience in case of polled sample. The farming experience is one of the important components, which helps the farmers to take decisions on suitable strategies related to crop cultivation. The banana and tomato crop require improved knowledge and skills for its cultivation otherwise the farmers may lose huge investment made on cultivation. The farming experience of the farmers will certainly influence their ability to accept and adopt the technologies with respect to cultivation. The medium level of farming experience also contributes for taking rational decisions. Hence, nearly half of the respondents are found in medium level of farming experience. The results of the present study are in line with the findings of Vinay Kumar (2008) and Shanabhoga *et al.*, (2017) [8].

### Land Holding

The [Table-1] revealed that more than half (60.00 %) of the VHFPC members were big farmers, followed by small (21.67 %) and marginal (18.33%) farmers. The results also reveal that nearly half (46.67 %) of the tomato growers were having small land holdings, followed by big (33.33 %) and marginal farmers (20.00 %). The pooled data depicted that, nearly half (46.66 %) of the respondents are big farmers, followed by small (34.17 %) and marginal (19.17 %) farmers.

It is needless to explain that the study area has more plain land and, in such lands, large holding are common unlike in hilly and coastal zones. The fragmentation of land due to family and social issues has also contributed to a greater number of smallholdings. The results are in line with the results of the study conducted by Gopala (2010).

### Achievement motivation

The data presented in [Table-1] revealed that, more than one third (38.83 %) of the VHFPC members were having medium level of achievement motivation and 35.00 percent of growers were having high level followed by low level (26.67 %) of achievement motivation. In case of AHFPC members, 40.00 percent of the farmers were having medium level of achievement motivation followed by 31.67 percent of them having low level and 28.33 percent were having high level of achievement motivation. The pooled data of the VHFPC members and tomato growers depicts that more than one third (39.17 %) of the respondents were having medium level of achievement motivation, followed by high (31.66 %) and low (29.17 %) level of achievement motivation. It is evident that majority of the VHFPC members are having sufficient land and easy access to inputs which helps to diversify the crops and to excel in crop production to get better returns.

Table-1 Personal characteristics of Farmer producer Organizations members

SN	Characteristics	Particulars	Mean	SD	Category	No	%
I	Personal characteristics						
1	Age	VHFPC members (n <sub>1</sub> =60)	-	-	Young (upto 35 years)	12	20.00
					Middle (36 to 50 years)	42	70.00
					Old (above 50 years)	6	10.00
		AHFPC members (n <sub>2</sub> =60)			Young (upto 35 years)	34	56.67
					Middle (36 to 50 years)	24	40.00
					Old (above 50 years)	2	3.33
		Pooled sample (N=60)			Young (upto 35 years)	46	38.33
					Middle (36 to 50 years)	66	55.00
					Old (above 50 years)	8	6.67
2	Education	VHFPC members (n <sub>1</sub> =60)	-	-	Illiterate	6	10.00
					Upto middle school	5	8.33
					High school	21	35.00
					JOC/ITI/Diploma	10	16.67
					PUC	11	18.33
		Graduate			7	11.67	
		AHFPC members (n <sub>2</sub> =60)			Illiterate	4	6.67
					Upto middle school	4	6.67
					High school	20	33.33
					JOC/ITI/Diploma	11	18.33
					PUC	15	25.00
		Graduate			6	10.00	
		Pooled sample (N=60)			Illiterate	9	7.50
					Upto middle school	41	34.17
					High school	21	17.50
					JOC/ITI/Diploma	26	21.67
					PUC	13	10.83
Graduate	10		8.33				
3	Family size		VHFPC members (n <sub>1</sub> =60)	-	-	Small (2-4members)	6
		Medium (5-7members)				27	45.00
		Big (8 and above)				27	45.00
		AHFPC members (n <sub>2</sub> =60)	Small (2-4members)			12	20.00
			Medium (5-7members)			39	65.00
			Big (8 and above)			9	15.00
		Pooled sample (N=60)	Small (2-4members)			18	15.00
			Medium (5-7members)			66	55.00
			Big (8 and above)			36	30.00
4	Farming experience	VHFPC members (n <sub>1</sub> =60)	21.2	9.191	Low (<16.605)	23	38.33
					Medium (16.605-25.795)	21	35.00
					High (>25.765)	16	26.67
		AHFPC members (n <sub>2</sub> =60)	14.883	7.547	Low (<11.110)	27	45.00
					Medium (11.110-18.657)	22	36.67
					High (>18.657)	11	18.33
		Pooled sample (N=60)	18.042	8.954	Low (<13.565)	36	30.00
					Medium (13.565-22.519)	57	47.50
					High (>22.519)	27	22.50
5	Land holding	VHFPC members (n <sub>1</sub> =60)	-	-	Marginal (<2.5acres)	11	18.33
					Small (2.5-5 acres)	13	21.67
					Big (>5 acres)	36	60.00
		AHFPC members (n <sub>2</sub> =60)			Marginal (<2.5acres)	12	20.00
					Small (2.5-5 acres)	28	46.67
					Big (>5 acres)	20	33.33
		Pooled sample (N=60)			Marginal (<2.5acres)	23	19.17
					Small (2.5-5 acres)	41	34.17
					Big (>5 acres)	56	46.66

The main risk factors for tomato production are yield, price and cost risks. Hence the motivational level among AHFPC members is low. However, achievement motivation helps an individual to decide and complete the tasks in a certain direction, which in turn helps in achieving the desired results. Hence, majority of the respondents belonged to medium to high level achievement motivation category. Similar results were observed by Shivani *et al.*, (2017) [9] and Shanabhoga *et al.*, (2019) [10].

#### Cosmopoliteness

It could be observed from the [Table-1] that, 35.00 percent of the VHFPC members were having high level of cosmopoliteness, followed by 33.33 percent had low level and 31.67 percent had medium level of cosmopoliteness. It can also be seen from the table 4.1 that 35.00 percent of the AHFPC members were having

high level of cosmopoliteness, followed by medium (33.33 %) and low (31.67 %) level of cosmopoliteness. The pooled data revealed that 35.00 percent of the respondents were having high level of cosmopoliteness, followed by medium (33.33 %) and low (31.67 %) level of cosmopoliteness.

A larger number of farmers had high level of cosmopoliteness because majority of the VHFPC members and AHFPC members had frequent contact with other members and officials of FPO as well as other individuals outside their social system. Farmers are also very keen and enthusiastic to know about the advances in agricultural field and other improved technologies from the fellow farmers. This would provide an opportunity for interpersonal communication within the members of the FPO to discuss about the new schemes and improved production practices. The results are line with the findings reported by Gopala (2015).

Table-1 Personal characteristics of Farmer producer Organizations members

SN	Characteristics	Particulars	Mean	SD	Category	No	%
II	Psychological and Communication characteristics						
6	Achievement motivation	VHFPC members (n <sub>1</sub> =60)	17.1	2.892	Low (<15.654)	16	26.67
					Medium (15.654-18.546)	23	38.33
					High (>18.546)	21	35.00
		AHFPC members (n <sub>2</sub> =60)	16.733	3.025	Low (<15.221)	19	31.67
					Medium (15.221-18.246)	24	40.00
					High (>18.246)	17	28.33
		Pooled sample (N=60)	16.917	2.952	Low (<15.441)	35	29.17
					Medium (15.441-18.393)	47	39.17
					High (>18.393)	38	31.66
7	Cosmopolitaness	VHFPC members (n <sub>1</sub> =60)	17.55	2.258	Low (<16.421)	20	33.33
					Medium (16.421-18.679)	19	31.67
					High (>18.679)	21	35.00
		AHFPC members (n <sub>2</sub> =60)	17.317	2.311	Low (<16.161)	19	31.67
					Medium (16.161-18.472)	20	33.33
					High (>18.472)	21	35.00
		Pooled sample (N=60)	17.475	2.242	Low (<16.354)	38	31.67
					Medium (16.354-18.596)	40	33.33
					High (>18.596)	42	35.00
8	Decision making ability	VHFPC members (n <sub>1</sub> =60)	6.933	0.899	Low (<6.484)	19	31.67
					Medium (6.484-7.383)	23	38.33
					High (>7.383)	18	30.00
		AHFPC members (n <sub>2</sub> =60)	7.317	1.049	Low (<6.792)	9	15.00
					Medium (6.792-7.841)	16	26.67
					High (>7.841)	35	58.33
		Pooled sample (N=60)	7.125	0.992	Low (<6.629)	28	23.33
					Medium (6.629-7.621)	39	32.50
					High (>7.621)	53	44.17
9	Scientific orientation	VHFPC members (n <sub>1</sub> =60)	16.9	1.633	Low (<16.083)	12	20.00
					Medium (16.083-17.717)	32	53.33
					High (>17.717)	16	26.67
		AHFPC members (n <sub>2</sub> =60)	15.1	2.319	Low (<13.940)	13	21.67
					Medium (13.940-16.260)	31	51.66
					High (>16.260)	16	26.67
		Pooled sample (N=60)	16	2.192	Low (<14.904)	22	18.33
					Medium (14.904-17.096)	76	63.33
					High (>17.096)	22	18.34
10	Management orientation	VHFPC members (n <sub>1</sub> =60)	15.783	2.164	Low (<14.702)	17	28.33
					Medium (14.702-16.865)	15	25.00
					High (>16.865)	28	46.67
		AHFPC members (n <sub>2</sub> =60)	15.883	1.805	Low (<14.981)	15	25.00
					Medium (14.981-16.786)	18	30.00
					High (>16.786)	27	45.00
		Pooled sample (N=60)	15.833	1.985	Low (<14.841)	32	26.67
					Medium (14.841-16.826)	33	27.50
					High (>16.826)	55	45.83
11	Economic motivation	VHFPC members (n <sub>1</sub> =60)	19.45	1.799	Low (<18.551)	21	35.00
					Medium (18.551-20.349)	23	38.33
					High (>20.349)	16	26.67
		AHFPC members (n <sub>2</sub> =60)	19.083	1.835	Low (<18.166)	23	38.33
					Medium (18.166-20.001)	24	40.00
					High (>20.001)	13	21.67
		Pooled sample (N=60)	19.267	1.818	Low (<18.357)	44	36.67
					Medium (18.357-20.176)	47	39.16
					High (>20.176)	29	24.17

\*VHFPC- Varuna Horticulture Farmer Producer Company Limited; AHFPC-Arkeshwara Horticulture Farmer Producer Company Limited

### Decision making ability

[Table-1] revealed that, 38.33 percent of the VHFPC members showed medium level of decision-making ability, followed by low (31.67 %) and high (30.00 %) level of decision-making ability. In case of AHFPC members, more than half (58.33 %) were having high level of decision-making ability, followed by medium (26.67 %) and low (15.00 %) level of decision-making ability. Pooled data revealed that, 44.17 percent of the respondents were having high-level decision-making ability, followed by medium (32.50 %) and low (23.33 %) level of decision-making ability. The ability of the farmer to make decision among the choices is the major psychological character which influences the cultivation of the crops and practices the better production technologies. Since, both VHFPC members and AHFPC members are the members of FPOs it will be easy for them decide the timely operations required in all the stages of crop production with proper guidance by the FPO officials. The study is in line with the results of the study conducted by Shanabhoga *et al.*, (2017) [11].

### Scientific orientation

It could be seen from the [Table-1] that, little more than half of the VHFPC members (53.33 %) and tomato (51.66 %) growers exhibited medium level of scientific orientation. An equal number of VHFPC members and AHFPC members (26.67%) each belonged to high level of scientific orientation category. Whereas 20.00 percent of the VHFPC members and 21.67 percent of the AHFPC members are belonged to low level scientific orientation category.

The pooled data revealed that, majority (63.33 %) of the respondents belonged to medium level of scientific orientation, followed by high (18.34 %) and low (18.33 %) level of scientific orientation category. The interventions of the FPOs to create awareness on the improved crop production technologies are not reaching to the VHFPC members and AHFPC members to the fullest. Though the respondents are having high degree of acceptance towards adapting scientific technologies, situational factors like income, climate, soil etc., hinders them to accept and adopt the new scientific production techniques. Similar findings were reported by Gopala (2015) and Shivani *et al.*, (2017) [12].

Table-1 *Personal characteristics of Farmer producer Organizations members*

SN	Characteristics	Particulars	Mean	SD	Category	No	%
II	Psychological and Communication characteristics						
12	Risk orientation	VHFPC members (n <sub>1</sub> =60)	9.1	1.946	Low (<8.127)	23	38.33
					Medium (8.127-10.073)	13	21.67
					High (>10.073)	24	40.00
		AHFPC members (n <sub>2</sub> =60)	9.717	1.878	Low (<8.777)	14	23.33
					Medium (8.777-10.656)	13	21.67
					High (>10.656)	33	55.00
		Pooled sample (N=60)	9.408	1.929	Low (<8.444)	37	30.83
					Medium (8.444-10.373)	26	21.67
					High (>10.373)	57	47.50
13	Innovative proneness	VHFPC members (n <sub>1</sub> =60)	28.783	4.64	Low (<26.463)	16	26.67
					Medium (26.463-31.103)	23	38.33
					High >31.103	21	35.00
		AHFPC members (n <sub>2</sub> =60)	29.117	4.404	Low <26.915	18	30.00
					Medium 26.915-31.319	22	36.67
					High >31.319	20	33.33
		Pooled sample (N=60)	28.95	4.507	Low <26.696	38	31.66
					Medium 26.696-31.204	41	34.17
					High >31.204	41	34.17
14	Social participation	VHFPC members (n <sub>1</sub> =60)	3.983	1.282	Low <3.342	18	30.00
					Medium 3.342-4.624	29	48.33
					High >4.624	13	21.67
		AHFPC members (n <sub>2</sub> =60)	4.317	1.513	Low <3.560	16	26.67
					Medium 3.560-5.073	26	43.33
					High >5.073	18	30.00
		Pooled sample (N=60)	4.15	1.406	Low <3.447	34	28.33
					Medium 3.447-4.853	51	42.50
					High >4.853	35	29.17
15	Mass media exposure	VHFPC members (n <sub>1</sub> =60)	4.033	1.822	Low <3.122	9	15.00
					Medium 3.122-4.945	26	43.33
					High >4.945	25	41.67
		AHFPC members (n <sub>2</sub> =60)	4.6	2.085	Low <3.558	17	28.33
					Medium 3.558-5.642	23	38.34
					High >5.642	20	33.33
		Pooled sample (N=60)	4.325	1.967	Low <3.342	42	35.00
					Medium 3.342-5.308	44	36.67
					High >5.308	34	28.33
16	Participation in activities of FPO	VHFPC members (n <sub>1</sub> =60)	3.683	1.6	Low <2.883	14	23.33
					Medium 2.883-4.483	26	43.34
					High >4.483	20	33.33
		AHFPC members (n <sub>2</sub> =60)	4.333	1.374	Low <3.646	21	35.00
					Medium 3.646-5.020	24	40.00
					High >5.020	15	25.00
		Pooled sample (N=60)	4.008	1.52	Low <3.248	24	20.00
					Medium 3.248-4.768	44	36.67
					High >4.768	52	43.33
17	Training received	VHFPC members (n <sub>1</sub> =60)	15.917	4.552	Low (<13.641)	14	23.33
					Medium (13.641-18.193)	28	46.67
					High (>18.193)	18	30.00
		AHFPC members (n <sub>2</sub> =60)	13.283	2.552	Low (<12.007)	24	40.00
					Medium (12.07-14.559)	11	18.33
					High (>14.559)	25	41.67
		Pooled sample (N=60)	14.6	3.905	Low (<12.647)	37	30.83
					Medium (12.647-16.553)	53	44.17
					High (>16.553)	30	25.00
18	Extension contact	VHFPC members (n <sub>1</sub> =60)	7.833	2.38	Low <6.643	14	23.33
					Medium 6.643-9.024	36	60.00
					High >9.024	10	16.67
		AHFPC members (n <sub>2</sub> =60)	5.833	3.093	Low <4.287	18	30.00
					Medium 4.287-7.380	32	53.33
					High >7.380	10	16.67
		Pooled sample (N=60)	6.833	2.926	Low <5.370	44	36.67
					Medium 5.370-8.296	49	40.83
					High >8.296	27	22.50
19	Extension participation	VHFPC members (n <sub>1</sub> =60)	7.5	3.286	Low <5.857	18	30.00
					Medium 5.857-9.143	26	43.33
					High >9.143	16	26.67
		AHFPC members (n <sub>2</sub> =60)	8.083	3.868	Low <6.149	22	36.68
					Medium 6.149-10.017	19	31.66
					High >10.017	19	31.66
		Pooled sample (N=60)	7.792	3.585	Low <5.999	34	28.33
					Medium 5.999-9.584	44	36.67
					High >9.584	42	35.00

\*VHFPC- Varuna Horticulture Farmer Producer Company Limited; AHFPC-Arkeshwara Horticulture Farmer Producer Company Limited

**Management orientation**

It is very interesting to know from the [Table-1] that, nearly half (46.67 %) of the VHFPC members had high level of management orientation followed by low (28.33 %) and medium (25.00 %) level of management orientation.

It is also very interesting to know from the same table that, 45.00 percent of the AHFPC members had high level of management orientation, followed by medium (30.00 %) and low (25.00 %) level of management orientation.



The pooled data shows that, 45.83 percent of the respondents were having high level of management orientation, followed by medium (27.50 %) and low (26.67 %) level of management orientation. The reasons for majority of the respondents belonging to high level of management orientation are that all the respondents are FPO members and they have good extension contacts and communication with field extension personnel. This helps them to re-orienting their current management practices to plan and implement of the production practices accordingly for the benefit. The personal exposure of farmers to various professional situations like extension meeting, exhibitions, field days, Krishimela etc., also might have contributed to develop certain level of management orientation as compared to other farmers. The study is in line with the results of the study conducted by Shankara (2019) [13] and Shanabhoga *et al.*, (2017) [14].

#### Economic motivation

The data shown in the [Table-1] revealed that, over one third (38.33 %) of the VHFPC members were having medium level of economic motivation, followed by low (35.00 %) and high level (26.67 %) of economic motivation. Whereas, 40.00 percent of the AHFPC members were having medium level of economic motivation, followed by low level (38.33 %) and high level (21.67 %) economic motivation. With respect to pooled data, 39.16 percent of the respondents were having medium level economic motivation followed by low level (36.67 %) and high (24.17 %) level economic motivation.

Every farmer will have an urge to increase his farm income by increasing farming efficiency in terms of B: C ratio by adopting better production practices. In this case, the FPOs are involved in providing better production techniques to VHFPC members and AHFPC members. In spite of it the members are not able to realize better price for their produce in the market because of extreme price fluctuations. Hence, majority of the respondents are exhibiting medium to low level of economic motivation. However, the FPOs can plan and provide guidance in market-oriented issues to members for their sustainable income. The similar results can be seen in the study conducted by Lavanya (2010) [15].

#### Risk orientation

It is clear from the [Table-1] that, forty percent of the VHFPC members had high level of risk orientation, followed by 38.33 and 21.67 percent of the VHFPC members were having low and medium level of risk orientation respectively. However, 55.00 percent of the AHFPC members had high level of risk orientation, followed by 23.33 and 21.67 percent of them had low and medium level of risk orientation, respectively. The pooled data revealed that, nearly half (47.50 %) of the respondents were having high level, followed by low (30.83 %) and medium (21.67 %) level of risk orientation.

Majority of the VHFPC members and AHFPC members are young to middle age group and have good education. Factors like land holding and other psychological characters of the farmer's also influences on their risk-taking behavior in farming situation. Though the farming experience of the respondents is high, the guidance and advices from the FPOs is helping them to analyze the situation to take risk and better decisions. The risk bearing ability of the respondents will play a vital role in adopting the improved cultivation practices and to take decisions on market of the produce. The results are in line with the study of Shanabhoga *et al.*, (2017).

#### Innovative proneness

The data in [Table-1] showed that, 38.33 percent of the VHFPC members were having medium level of innovative proneness and 35.00 and 26.67 percent of the VHFPC members were having high and low level of innovative proneness, respectively. Whereas, over one-third of the AHFPC members (36.67 %) had medium level of innovative proneness and 33.33 and 30.00 percent of the AHFPC members were having high and low levels of innovative proneness respectively.

The pooled data depicted that, equal percent (34.17 % each) of the respondents were having high and medium level of innovative proneness and 31.66 percent of the respondents were having low level of innovative proneness. Majority of the respondents belonged to medium and high level of innovativeness. Innovativeness plays a greater role in the individuals' personality. The person with higher innovativeness can do things rapidly and more precisely than others. This

also may be attributed to the fact that majority of the respondents had high schooling and pre university/diploma. Generally, higher the formal education level, higher the attitude towards innovations. In such conditions, the members of the FPOs try to seek more information and try out new ideas and technologies within their budget and limits and members who are prone to innovations will try to gather information regarding the new technology from various specialists from the training or the advice given from the FPO, they wanted to learn new ways of farming, improved cultivation practices and adopt those technologies at faster rate with maximum accuracy. These results are in line with the study conducted by Gopala (2010) and Yavana Priya (2010) [16].

#### Social participation

The data from [Table-1] depicts that, nearly half (48.33 %) of the VHFPC members had medium level of social participation, followed by low (30.00 %) and high level (21.67 %) of social participation. Whereas, nearly half (43.33 %) of the AHFPC members were having medium level of social participation, followed by high (30.00 %) and low (26.67 %) level of social participation. The pooled data revealed that 42.50 percent of the respondents were belonged to medium level of social participation category, followed by high (29.17 %) and low (28.33 %) level category. The presence of Farmer producer organizations in the village and members involvement in the organizational activities directly or indirectly provides them social contact, which greatly influences in adopting various new agricultural practices as well as help them share the views and ideas on various farming aspects of banana and tomato. Also, the initiation of different programmes and schemes from the Government as well as from line departments were contributing towards active participation of the respondents in social activities. The study is in line with the results of the study conducted by Lavanya (2010).

#### Mass media exposure

It is seen from the [Table-1] that, 43.33 percent of the VHFPC members had medium level of mass media exposure followed by high (41.67 %) and low level (15.00 %) of mass media exposure. Whereas, 38.34 percent of the AHFPC members had medium level of mass media exposure and 33.33 percent of the AHFPC members belonged to high level, followed by 28.33 percent of them belonged to low level of mass media exposure. In the pooled data, a little more than one third (36.67 %) of the respondents were having medium level of mass media exposure, followed by low (35.00 %) and high (28.33 %) level of mass media exposure.

Mass media plays major role in disseminating information effectively. Farmers who are members in the FPOs are more accessible to the mass media such as television, radio, newspaper and smart phones. High level of mass media utilization explains respondents are very much dependent on mass media not only as a source of information but also as a source of entertainment. Mass media helps the members of the FPO to get the updates on the latest developments which are a good sign for the interest of farmers. The members in the FPO use social media platforms like WhatsApp and Facebook group to disseminate the information among them. Thereby the respondents can be aware of the things, which are happening in day-to-day life. The study depicts that the respondents having medium level of mass media exposure have greater influence in adopting new agricultural technologies. The obtained results are in line with the study conducted Lavanya (2010).

#### Participation in activities of FPO

It is depicted from the [Table-1] that, 43.34 percent of the VHFPC members had medium level of participation in the activities of FPO followed by high (33.33 %) and low level (23.33 %) of participation in the activities of FPO. Whereas, 40.00 percent of the AHFPC members had medium level of participation in the activities of FPO and 35.00 percent of the AHFPC members belonged to high level, followed by 25.00 percent of them belonged to low level of participation in the activities of FPO. In the pooled data, 43.33 percent of the respondents were having high level participation in the activities of FPO, followed by medium (36.67 %) and low (20.00 %) level participation in the activities of FPO. The members of the FPO are educated and majority belong to medium to high innovative S.

prone category, hence the members are much interest in farming as well as to know different aspects of new agricultural technologies developed in banana as well as tomato cultivation. This shows that they show much interest in the participation of various activities of the FPO, which in turn help them to increase the yield and which also help them to increase the income level to lead a better standard of living. The results are in line with the study conducted by Gopala (2015).

### Training received

It is depicted from the [Table-1] that, nearly half (46.67 %) of the VHFPC members had medium level of training received followed by high (30.00 %) and low level (23.33 %) training received. Whereas, 41.67 percent of the AHFPC members had high level of training received and 40.00 percent of the AHFPC members belonged to low level, followed by 18.33 percent of them belonged to medium level of training received.

In the pooled data, 44.17 percent of the respondents were having medium level of training, followed by low (30.83 %) and high (25.00 %) level of training received. The members of the FPO are much interested to know about the cultivation practices of banana and tomato, thus they attain various training programmes conducted by the FPO, training provides an opportunity to farmers to know about the improved farming practices, marketing linkages etc., the results are similar to the study conducted by Narayanaswamy (2005) [17] and Gopala (2015).

### Extension contacts

The data in [Table-1] revealed that 60.00 percent of the VHFPC members had medium level of extension contact, followed by 23.33 percent having low level and 16.67 percent of them having high level of extension contact. Whereas, a little more than half (53.33 %) of the AHFPC members had medium level of extension contact and interestingly 30.00 percent of the AHFPC members belonged to low level of extension contact, followed by 16.67 percent of them belonging to high level of extension contact. The pooled data depicts that 40.83 percent of the respondents were having medium level extension contact, followed by low (36.67 %) and high (22.50 %) level of extension contact. Extension contact results in purposeful action which is largely contingent upon an individual's belief in his ability to perform the action correctly and effectively and thus he frequently contacts various departmental officials to seek more information and to clarify the doubts pertaining to the latest and improved crop production practices on banana and tomato. The present study depicts that medium level of extension contact help the respondents in gathering more information from the extension personnel regarding various aspects of scientific cultivation of banana and tomato. The study is in line with the results of the study conducted by Karla *et al.* (2013) [18].

### Extension participation

The data in [Table-1] depicts that, 43.33 percent of the VHFPC members were having medium level of extension participation followed by low (30.00 %) and high level (26.67 %) of extension participation. It can also be observed from the Table 4.1 that, 36.68 percent of the AHFPC members were having low level of extension participation, followed by an equal percent (31.66 %) each of the AHFPC members belonged to medium and high level of extension participation. From the pooled data it can be visualized that one third (36.67 %) of the respondents were having medium level of extension participation, followed by high (35.00 %) and low (28.33 %) level of extension participation [19-22]. The study is in line with the results of the study conducted by Karla *et al.* (2013) and Gopala (2015).

**Application of research:** Participation in the extension activities provides opportunities for contrived experiences and sources of improved agricultural production technologies prevailing in the region or locality. The extension activities conducted by FPOs were according to the needs and interest of the farmers, which has motivated its members to take up cultivation of banana and tomato in a better manner with improved technologies. The results obtained may be due to eagerness of the respondents in solving their problems with extension workers, also the interest in extension activities to gather recent information about banana and tomato cultivation practices

**Research Category:** Farmer Producer Organizations (FPOs)

**Abbreviations:** VHFPC- Varuna Horticulture Farmer Producer Company Limited, AHFPC-Arkeshwara Horticulture Farmer Producer Company Limited, FPOs- Farmer Producer Organizations

**Acknowledgement / Funding:** Authors are thankful to the Varuna Horticulture Farmer Producer Company Limited (VHFPC) and Arkeshwara Horticulture Farmer Producer Company Limited (AHFPC) of Mysuru district for the kind co-operation during my data collection. Authors are also thankful to the Department of Agricultural Extension, University of Agricultural Sciences, Bengaluru, 560065, Karnataka, India

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University: University of Agricultural Sciences, Bengaluru, 560065, India  
Research project name or number: PhD Thesis

**Author Contributions:** All authors equally contributed

**Author statement:** All authors read, reviewed, agreed and approved the final manuscript. Note-All authors agreed that- Written informed consent was obtained from all participants prior to publish / enrolment

**Study area / Sample Collection:** Members of two Farmer Producer Organizations from Mysuru district of Karnataka state

**Cultivar / Variety / Breed name:**

**Conflict of Interest:** None declared

**Ethical approval:** This article does not contain any studies with human participants or animals performed by any of the authors.  
Ethical Committee Approval Number: Nil

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