

## A Study on Socio-personal Profile and Factors Contributing to the Success of Farmer Producer Organizations (FPOS) in Karnataka

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### ABSTRACT

The formation of farmers producer groups, especially women, has proven to be one of the most effective strategies for addressing agriculture's numerous problems, including improved market access for adoption of technologies. Men and women's participation in producer organisations is influenced by economic, social and cultural factors, including their access to natural resources and other productive resources. On the other hand, equal participation by men and women can lead to greater benefits and empower women and their families. Hence, in this context, the present study examines the socio-personal profile of women members and non-members of Farmer Producer Organizations (FPOs) in Karnataka, India, study was conducted during 2022-2023, using a sample of 180 women (90 members and 90 non-members). FPO members are predominantly middle-aged (51.12%), have higher education, a medium-high annual income, and greater landholding with 51.11 per cent being marginal farmers). They also maintain higher extension contact at a medium level (97.77%). Correlation analysis shows members' attitude is positively associated with age ( $r=0.274$ ), family size ( $r=0.310$ ), landholding ( $r=0.411$ ), achievement motivation ( $r=0.379$ ), extension contact ( $r=0.414$ ) and organizational participation ( $r=0.273$ ). Regression identifies age ( $\beta=2.349^*$ ), landholding ( $\beta=2.547^*$ ), achievement motivation ( $\beta=2.349^*$ ), social participation ( $\beta=2.449^*$ ), and organizational participation ( $\beta=2.259^*$ ) as significant predictors of positive attitude. Participation in FPO activities correlates with experience ( $r=0.503$ ), innovativeness ( $r=0.344$ ), social media use ( $r=0.316^{**}$ ), annual income ( $r=0.201^*$ ) and landholding ( $r=0.228^*$ ). The findings indicate FPOs empower women through collective action and market access. However, members' pre-existing advantages in resources and social capital suggest a potential inclusion gap for the most marginalized. The study concludes that while FPOs enhance socio-economic conditions, targeted policies are needed to ensure truly inclusive participation.

**Keywords :** Women FPO members, Farmer Producer Organizations (FPOs), Non-members, Socio-personal profile

**A**GRICULTURE sector is diverse and full of contradictions. The sector accounts for a comparatively small share of the global economy, but remains central to the lives of a great many people Singh *et al.* (2021). Most of the world's farmers are found in middle and low-income countries,

wherein, agriculture accounts for a much greater share of their national income and employment. For instance, in India, agriculture represents 18.00 per cent national income and 54.00 per cent of employment. In developed countries a very small percentage of people are involved in agriculture, yet

it contributes a major share to the national income Sahu *et al.* (2017).

### Status of Farmer Producer Organization (FPO) in India

Indian agriculture is primarily distinguished by a huge number of dispersed and fragmented small farms. Small and marginal farmers with 1 or 2 acres owned about 80 per cent of the landholdings. India's farmers are skilled producers, but due to a lack of market places in rural areas and their own weak marketing abilities, they are unable to effectively market their farm products. These farmers lack organisation, which prevents them from getting a fair price for their produce. Typically, they don't employ labourers; instead, family members work in their specialised fields. For agricultural products, there is no set price structure or norm. Due to insufficient rainfall, water scarcity and low prices, the majority of farmers are switching to another line of work. Sometimes these farmers stop farming without informing anyone. Mobilising farmers for collective action, coordinating inputs and collective marketing to take advantage of economies of scale is one of the viable choices for effective marketing Sahu *et al.* (2017).

### Status of Farmer Producer Organization (FPO) in Karnataka

The Department of Horticulture, Government of Karnataka has initiated the formation of FPOs during 2014-15 with the support of FPO nodal agency, Small Farmers Agribusiness Consortium (SFAC). Based on the Government of India (2013), SFAC, a society under the Ministry of Agriculture and Farmers Welfare, works as a single point of contact for technical support, training requirements, research and knowledge management, also to establish connections to the investment and technology markets.

Considering this, the Karnataka State Department of Horticulture set a goal of establishing 92 FPOs on horticulture commodities between 2014 and 2016, with managerial help from SFAC. Additionally, to a certain part of the budget for 2014-15, the Indian government announced a PRODUCE (Producer Organisation Development and Upliftment Corpus) Fund of 200 crore for the evolution of 2,000 FPOs, which will be implemented by NABARD. These two actions have aided in the development of the FPO movement in the state according to Kumar and Reddy (2020) and Devi and Patil (2021).

Therefore, it's necessary to understand how well Farmer Producer Organisations (FPOs) operate for their members and to determine their socio-personal profile of women members of Farmer Producer Organizations (FPOs) and non-members.

### METHODOLOGY

The study was conducted in Karnataka state of southern India during 2022-23. In Karnataka three districts *viz*, Belgaum, Bijapur and Gadag districts have been selected. From each district one FPO was selected based on the criteria in which maximum

**TABLE 1**  
**Selection of respondents**

No. FPOs	Respondents	
	Women members	Non-members
FPO -H1	30	30
FPO -A1	30	30
FPO -F1	30	30
Total	90	90
Total	180	180

(Note: H1- Horticultural FPO, A1- Agricultural FPO, F1- Fisheries FPO)

District	Names of Farmer Producer Organizations (FPOs)
Karnataka	
Belgaum	Hallur Horticulture Farmer Producer Company Limited
Bijapur/Vijayapur	Nidgundi Sri Hadi Basavannappa Oilseed and Millets Producer Company Limited
Gadag	Sri Gangamathe Fish Farmer Producer Company Limited

women members' participation in FPO and registered under company act. Farmer producer organizations which are doing agricultural activities, horticultural activities and fisheries were purposively selected. Selected FPOs should be recognized under NABARD or SFAC. Thus, three Farmer Producer Organizations (FPOs) from Karnataka have been selected for the study.

### Selection of the Respondents

From each selected FPO 30 women members (30 from each FPO) participating actively was randomly selected. Hence, 90 women members from FPO and 90 non members near to FPO constitute the sample size. Thus in all a total of 180 women members formed the sample for the study as detailed below.

Data was collected through personal interview method with pre tested structured schedule and analysed through frequency, percentage and class interval, correlation and regression.

## RESULTS AND DISCUSSION

### Socio-personal Characteristics of Women Members and Non-members of Farmer Producer Organizations (FPO)

#### Age

Table 2 shows that more than half (51.12%) of the Karnataka FPO members were middle-aged, only a small percentage (20.00%) were belonged to old age, and the remaining members (28.88%) were belonged to young age category.

Similarly, more than half (56.67%) of non FPO members belonged to middle age, very few (27.78%) belonged to old age and remaining (15.55%) belonged to young aged category.

Based on the data in Table 2, more than half of women who were FPO members and non-members belonged to the middle age group. In contrast to older farmers, middle-aged farmers are typically physically stronger, more energetic, profit-oriented and inventive. Middle age is an active and more productive age. Due to the Farmer Producer Organisation (FPO) concept's recent

**TABLE 2**  
**Socio personal profile of women members and non-members of Farmer Producer Organizations (FPOs)**  
(n=180)

Variables	Frequency (Percentage)	
	FPO Members (n <sub>1</sub> =90)	Non members (n <sub>2</sub> =90)
<b>Age</b>		
Young (18 - 35 years)	26 (28.88)	14 (15.55)
Middle (36 – 50 years)	46 (51.12)	51 (56.67)
Old (51 years and above)	18 (20.00)	25 (27.78)
<b>Education</b>		
Illiterate (0)	21 (23.33)	39 (43.33)
Primary (class 1-4)	05 (05.55)	19 (21.11)
Middle school (class 5 - 7)	11 (12.22)	11 (12.22)
High school (class 8 -10)	25 (27.77)	10 (11.11)
PUC (class 11 - 12)	18 (20.00)	06 (06.66)
Degree (> 12)	10 (11.13)	05 (05.57)
<b>Family type</b>		
Nuclear	69 (76.66)	73 (81.11)
Joint	21 (23.34)	17 (18.89)
<b>Family size</b>		
Small (1 - 4 member)	26 (28.88)	31 (34.44)
Medium (5 - 8 members)	41 (45.56)	47 (52.22)
Large (9 & above)	23 (25.56)	12 (13.34)
<b>Annual income</b>		
Low (up to Rs. 1,32,000/-)	0.0	45 (50.00)
Medium (Rs. 1,32,000/- Rs. 5,72,000/-)	63 (70.00)	36 (40.00)
High (>Rs. 5,72,000/-)	27 (30.00)	09 (10.00)
<b>*Family occupation</b>		
Agricultural and allied sector	90 (100)	90 (100)
Business	17 (18.88)	04 (04.44)
Wage labour	09 (10.00)	24 (26.66)
Others	13 (14.44)	11 (12.22)
<b>Marital Status</b>		
Married	66 (73.33)	64 (71.11)

Continued....

**Table 2 Continued....**

Variables	Frequency (Percentage)	
	FPO Members (n <sub>1</sub> =90)	Non members (n <sub>2</sub> =90)
Unmarried	16 (17.78)	19 (21.11)
Widow	08 (08.89)	07 (07.78)
Divorce	0.0	0.0
<b>Land holding</b>		
Landless/ No land	09 (10.00)	28 (31.11)
Marginal farmers (<2.5 acres)	46 (51.11)	34 (37.77)
Small farmers (2.5 - 5.0 acres)	27 (30.00)	21 (21.12)
Medium farmers (5-10 acres)	08 (08.89)	09 (10.00)
Big farmers (>10 acres of dry land)	0.0	0.0
<b>Experience in FPO</b>		
1-2year	09 (10.00)	-
2-3 years	27 (30.00)	-
3-4 years	20 (22.22)	-
4 years and continuing	34 (37.78)	-

introduction, more young and middle-aged people may have been inspired to get involved. In rural communities, women marry at young age and have grown children by the age of 35. In rural areas, unmarried women defer entering the workforce until they are married. These factors might have led to more middle-aged women and fewer young women participating in FPOs. Similar results were reported by Srikar and Akshokan (2022), Babu (2021) and Dechamma *et al.* (2020).

### Education

It was observed that, less than one third (23.33%) of the FPO women members were illiterates. Only 5.55 per cent of them educated up to primary class (1-4), 12.22 per cent studied up to middle school (5-7), nearly one third (27.77%) had education up to high school (class 8-10), 20.00 per cent had education up to PUC (11-12) and 11.13 per cent studied up to

degree. The results in Table (2) depicts that, in non FPO members, less than half (43.33%) of the respondents were illiterates. Whereas, 21.11 per cent educated up to primary class (1-4), 12.22 per cent studied up to middle school (5-7). Around 11.11 per cent of them had education up to high school (class 8-10), 06.66 per cent had education up to PUC (11-12) and only 05.57 per cent studied up to degree.

Therefore, it is clear from the above details that, most of the women non-members were illiterates and nearly one third of FPO members educated up to high school. The majority of FPO women, both members and non-members, may have low socioeconomic status in their communities, which could be one of the potential causes. Children from low-income families begin working at a young age and many do not attend school. Parents may be reluctant to enroll their daughters in school, to help out around the house and to take care of younger siblings due to gender bias in education. Lack of motivation, a lack of familial support and ignorance of the value of education may also be contributing factors. The fact that the majority of the respondents were illiterate may have been influenced by all of these variables. These results are consistent with those of Dechamma *et al.* (2020), Sajeev *et al.* (2012) and Babu (2021).

### Type of family

Regarding type of family, Table 2 concluded that majority of FPO women members (76.66%) had nuclear families and remaining (23.34%) belonged to joint families. The results also indicated that, majority (81.11%) of non FPO members belonged to nuclear family and very few (18.88%) of them belonged to joint family.

Results from the study indicated that in both the states, nearly one third of FPO women members were educated up to high school and most of the FPO non-members are illiterates. The majority of FPO women, both members and non-members, may have low socioeconomic status in their communities, which could be one of the potential causes. Children from low-income families begin working at a young age and many do not attend school. Parents may be

reluctant to enroll their daughters in school, to help out around the house and to take care of younger siblings due to gender bias in education. Lack of motivation, a lack of family support and ignorance of the value of education may also be contributing factors. The fact that the majority of the respondents were illiterate may have been influenced by all of these variables. These results are consistent with those of Dechamma *et al.* (2020) and Babu (2021).

### Family Size

The categorization of family size indicates that, little less than half of respondents (45.56%) from FPO members belonged to medium family (5-8) size, 28.88 per cent belonged to small family size (1-4 members) followed by 25.56 per cent belonged to large (9 & above) family size. It is seen that, more than half (52.22%) of the non FPO women members belonged to medium (5-8) family size. A little less than one third (34.44%) of them belonged to small (1-4) family size. Very few (13.34%) belonged to large (9 and above) family size.

In both states, the majority of women who were FPO members and non-members belonged to medium-sized families (5 to 8 members), according to data on family size. Five to eight members of the majority of the families actively and enthusiastically participated in this activity. The majority of family members, including females, may be prepared to provide their skills as needed, which is the most likely explanation. These results concur with Manaswi *et al.* (2020) and Venkatesan *et al.* (2020) findings.

### Annual Income

It was observed in Table 2 that, majority (70.00%) of the FPO women members belonged to medium income category (Rs.1,32,000 - Rs.5,72,000) and one third (30.00 %) of the respondents belonged to high income category. The results also indicated that, half (50.00%) of the non FPO women members belonged to low income (up to Rs.1,32,000) category followed by medium (40.00%) and 10.00 per cent belonged to high income (> Rs.5,72,000) category.

Most of FPO women members from both the states belonged to medium income category (Rs.1,32,000 - Rs.5,72,000). This may be due to effective services rendered by FPC to its members. A small producer does not have the volume to take advantage of economic scale. The FPOs will help to eliminate the chain of intermediaries in agricultural marketing. The primary producers can benefit from the economies of scale through accumulation. The FPO members have good bargaining power in the form of bulk suppliers of inputs and buyers of produce. Hence study indicated that, majority of the FPO women members belonged to medium income category. Similar results were seen in the studies by Venkatesan *et al.* (2020), Chopade *et al.* (2019), Pandian & Ganesan (2019), Verma *et al.* (2019), Parthiban *et al.* (2015), Kaur *et al.* (2017) and Gantasala & Gantasala (2017).

### Family Occupation

The results in Table 2 indicated that, cent per cent of women were involved in agriculture and allied activities. Hence the sample for the study was purposively selected.

Apart from FPO activities women were also involved in other activities *viz.*, business, wage labourers, agriculture and allied activities etc. However, 18.88 per cent of the FPO women members were doing business, 10.00 per cent of them were wage labourers and 14.44 per cent belonged to other (Auto drivers (family men), vegetable sellers and wage labourers in market yard) activities.

With respect to non FPO members nearly one third of the respondents (26.66%) were wage labourers, only (04.44%) were doing business and 12.22 per cent of the respondents were doing other activities. Hence it is clear from above results that, in both states most of the women FPO members and non-members were doing agricultural and allied activities.

The findings from the study indicate that, 100 per cent of selected FPO members and non-members were doing agriculture, horticulture and fisheries activities from both the states respectively. All have agricultural

and allied activities as their family occupation. As the selection of sample was purposive. Few of them were having other occupations such as diary, farming with marginal landholdings and other occupations such as auto drivers, vegetable sellers, wage labourers, cooking for marriages *etc.* The findings were similar to Kaur *et al.* (2017) and Gantasala & Gantasala (2017)

### Marital Status

Table 2 indicated that, majority (73.33%) of FPO women members were married, 17.78 per cent of them were unmarried and remaining (08.89%) were widows. It is seen in Table 2 that with respect to non-members, majority (71.11%) of women respondents were married, 21.11 per cent of them were unmarried and remaining (07.78%) were widows.

The majority of the women in this study were in the middle age category. Women who are at this age usually get married. Unmarried women generally do not work before getting married in villages. According to the study findings, most FPO women members and non-members are married. The results are consistent with those of Bansal *et al.* (2017) and Harry and Ewubare (2017), which found that the majority of respondents were married.

### Land Holding

The results presented in Table 2 indicated that, more than half (51.11%) of FPO women members belonged to marginal land holding, 30.00 per cent of them belonged to small land holding, 08.89 per cent belonged to medium land holding (5-10 acres) and 10.00 per cent had no land. The results presented in Table 2 indicated that, more than one third (37.77 %) of non FPO women members belonged to marginal land holding, 21.12 per cent belonged to small land holding, 10.00 per cent belonged to medium land holding (5-10 acres) and 31.11 per cent had no land.

The results showed that a larger percentage of FPO women members were small and marginal farmers, and that the majority of non-members likewise belonged to this category, followed by those without any land. The fact that FPO offers additional services

to its members may be the reason because there are more farmers in the organisation. Therefore, there are more small and marginal farmers within FPO's membership. In contrast, some of the non-members came from towns close to the FPO and were landless yet engaged in agricultural and related businesses. The current study's findings concurred with those of Gantasala & Gantasala (2017), Kaur *et al.* (2017), and Hmingthanzuala *et al.* (2016).

### Experience in FPO

Experience in FPO was confined only with registered FPO women members from Karnataka. Results from the Table 2 indicated that, more than one third (37.78%) of the respondents had 4 and above years of experience followed by one third (30.00%) had 2-3 years of experience, 22.22 per cent had 3-4 years of experience and only 10.00 per cent of them had less than 1-2 year of experience.

From the above results it was concluded that, more than one third of the FPO women members had 4 and above years of experience. The similar findings were observed by Vignesh *et al.* (2019), Uchenna & Okafor (2015) and Patel *et al.* (2018).

### Extension Contact

The results from Table 3 indicated that, great majority of the FPO members belonged to medium level (97.77%) of extension contact and only 02.23 per cent of them belonged to low level of extension contact. Whereas, with respect to non-members great majority (88.88%) of the respondents belonged to low level of extension contact and only 11.12 per cent of them belonged to medium level.

The majority of the female FPO members were small-scale and marginal farmers and through FPO, they frequently had the chance to interact with extension personnel, KVK scientists and assistant horticulture, fisheries and agriculture officers. Since the majority of FPO non-members belonged into the landless category, they had no need to get in touch with extension personnel. Another factor could be that the majority of non-members were uneducated and unaware that they needed to get in touch with anyone.

**TABLE 3**  
**Categorization of respondents based on the selected independent variables of the study**  
 (n=180)

Variables	Frequency (Percentage)	
	FPO Members (n <sub>1</sub> =90)	Non members (n <sub>2</sub> =90)
<b>Extension contact</b>		
Low (1-8)	02 (02.23)	80 (88.88)
Medium (9-16)	88 (97.77)	10 (11.12)
High (17-24)	0.0	0.0
<b>Social media participation</b>		
Low (1-6)	07 (07.77)	28 (31.12)
Medium (7-12)	83 (92.23)	62( 68.88)
High (13-18)	0.0	0.0
<b>Organizational participation</b>		
Low (1-7)	0.0	83 (92.23)
Medium (8-14)	90 (100)	07 (07.77)
High (15-21)	0.0	0.0
<b>Innovativeness</b>		
Low (1-15)	22 (24.44)	65 (72.22)
Medium (16-30)	37 (41.11)	25 (27.78)
High (31-45)	31 (34.45)	0.0
<b>Achievement motivation</b>		
Low (1-4)	0.0	0.0
Medium (5-8)	0.0	23 (25.55)
High (9-14)	90 (100)	67 (74.45)
<b>Risk Orientation</b>		
Low (1-10)	34 (37.78)	79 (87.77)
Medium (11-20)	38 (42.22)	11 (12.23)
High (21 &30)	18 (20.00)	0.0

This may be the reason behind the majority of them having low extension contact. The results agreed with those of Venkatesan *et al.* (2020) and Babu (2021).

### Social Media Participation

Table 3 shows the categorization of social media participation in FPO women members and non FPO

women members. It is clear that great majority (92.23%) of FPO members belonged to medium level of social media participation and remaining (07.77%) belonged to low category. Whereas in non-members majority (68.88%) of them belonged to medium level of social media participation and less than one third (31.12%) belonged to low level of social media participation respectively. The social media facilitates their information gathering, cross-referencing and verification as well as the adoption of tactics that fit their lifestyles. As a result, the study's findings indicate that the majority of FPO women members and non-members fell into the category of medium social participation. The results agreed with those of Kaur *et al.* (2017) and Parthiban *et al.* (2015).

### Organizational Participation

The results from Table 3 indicated that, cent per cent of FPO members belonged to medium level of organizational participation. With respect to non-member's great majority (92.23%) of the respondents belonged to low level of organizational participation.

Most of the women members belonged to medium level of organizational participation, it might be due to that, women members in FPOs were more organized. As detailed in study findings, FPO women members participated in more number of organizations including FPO. Whereas non-members also participate but occasionally because of their less tendency to participate due to less land holding. The other reason could be lack of education and consequently low self-esteem and confidence leading to hesitation to participate in organizations like panchayatis, religious groups *etc.* However, few of the respondents were members of self-help groups like that of Shri Dharmasthala Manjunatheshwar Society and Navachaitanya in Karnataka. So the present study revealed medium and low organizational participation with respect to FPO members and non-members respectively. The findings were in confirmation with the findings of Venkatesan *et al.* (2020) and Chopade *et al.* (2019) who found that majority of the women respondents had low organizational participation.

### Innovativeness

Table 3 on categorization of women members and non members innovativeness indicated that, less than half (41.11%) of the FPO women members belonged to medium level of innovativeness, 34.45 per cent belonged to high level and only 24.44 per cent belonged to low level. With respect to non-members 72.22 per cent of them belonged to low level and 27.75 per cent of the respondents belonged to medium level, respectively.

FPO women members are having high innovativeness due to their more landholding compared to non-members. This may be due to their eagerness to learn new farming techniques, getting better price for their produce; they will be searching the platform. Thereby they want to get success and profit in their ventures. Whereas non-members having less land holding and with no land might have not understood the role of FPOs in overcoming the obstacles in their livelihood activities. But in due cause they may join the FPOs as members after seeing the success of other members. The results are in conformity with the findings of Dechamma *et al.* (2020) and Babu (2021)

### Achievement Motivation

Results from the Table 3 revealed categorization of women members and non-members regarding to achievement motivation. Cent per cent of FPO women members and majority of non-members (74.45%) belonged to high level of achievement motivation. Man is a social animal and is influenced a lot by people surrounding them. Friends are one of the greatest sources of strength for an individual. So, the motivation from friends will strongly influence in joining to FPO and becoming members. Along with friends, family was also one of the important motivating factors in doing all FPO activities. Supportive family plays an important role in dealing with every part of life. Most of the works assigned in FPOs are target based and reaching that target along with friends as an organized group is very easy. Hence most of the FPO members were belonged to high achievement motivation category and being encouraged by the services and benefits provided by

FPO. The results are in conformity with the findings of Venkatesan *et al.* (2020), Chopade *et al.* (2019) and Babu (2021)

### Risk Orientation

It could be observed from the Table 3 that, categorization on risk orientation of FPO women members. In FPO members, 42.22 per cent of the respondents belonged to medium level of risk orientation, 37.78 per cent belonged to low level and 20.00 per cent belonged to high level. With regard to non-members majority (87.77%) of them belonged to low level of risk and 12.23 per cent belonged to medium level of orientation category. Especially in Indian, agriculture and allied sectors is considered as gambling with nature. Risk bearing capacity of an individual which depends upon the personal, psychological, socio-economic characteristics and the resources possessed by her. Majority of FPO members and non-members were belonged middle aged, low education, medium land holding, medium social media participation and medium extension contact. Hence these factors might have contributed for medium risk orientation. The results are in conformity with the findings of Venkatesan *et al.* (2020), Chopade *et al.* (2019) and Babu (2021).

### Livelihood Activities

Results from the Table 4 indicated that, majority (86.66%) of FPO women members were engaged in agriculture + horticulture, 61.11 per cent were involved in agriculture + dairy, 53.33 per cent were doing agriculture + animal husbandry, 34.44 per cent of the respondents were doing agriculture + fisheries. More than half of the respondents (52.22%) were doing horticulture + dairy, 31.11 per cent were doing horticulture + animal husbandry, 32.22 per cent were doing horticulture + fisheries, 10.00 per cent were doing fisheries + dairy, 26.66 per cent were doing fisheries + animal husbandry and 22.22 per cent were doing other activities (services, kirana shops etc.). With respect to FPO non-members great majority (90.00%) of them were doing agriculture + horticulture, 56.66 per cent were doing agriculture + dairy, 54.44 per cent were doing agriculture + animal

**TABLE 4**  
**Livelihood activities of women members of FPO's and non-members'**

(n=180)

Livelihood activities	Frequency (Percentage)	
	FPO Members (n <sub>1</sub> =90)	Non members (n <sub>2</sub> =90)
Agriculture + Horticulture	78 (86.66)	81 (90.00)
Agriculture + Dairy	55 (61.11)	51 (56.66)
Agriculture + Animal husbandry	48 (53.33)	49 (54.44)
Agriculture + Fisheries	31 (34.44)	29 (32.22)
Horticulture + Dairy	47 (52.22)	36 (40.00)
Horticulture + Animal husbandry	28 (31.11)	19 (21.11)
Horticulture + Fisheries	29 (32.22)	33 (36.66)
Fisheries + Dairy	09 (10.00)	18 (20.00)
Fisheries + Animal husbandry	24 (26.66)	22 (24.44)
Any other Specify	20 (22.22)	26 (28.88)

\* Multiple responses are possible

husbandry, 32.22 per cent of them were doing agriculture + fisheries. Less than half (40.00%) were doing horticulture + dairy, 21.11 per cent were doing horticulture + animal husbandry, 36.66 per cent were doing horticulture + fisheries, 20.00 per cent were doing fisheries + dairy, 24.44 per cent of doing fisheries + animal husbandry and 28.88 per cent were doing other activities (services, kirana shops etc..).

### Cropping Pattern

Results from the Table 5 indicated that, with respect to FPO women members regarding agricultural crops, nearly half 46.66 per cent were growing cereal crops, 34.44 per cent pulses, 33.33 per cent were growing oil seeds and 20.00 per cent were growing commercial crops. Whereas, in horticultural crops, less than one third (31.11%) were growing fruits (Banana, Mango, Grapes), 43.33 per cent were growing spices (Ginger, turmeric) and 46.66 per cent were growing Plantation crops (Coconut etc.).

Results from the Table 5 revealed that, with respect to non women members regarding agricultural crops, less than half 42.22 per cent were growing cereal crops, 43.33 per cent were growing pulse crops, 21.11

per cent were growing oil seed crops and 13.33 per cent were growing commercial crops. Whereas in horticultural crops, 18.88 per cent were growing fruit

**TABLE 5**  
**Cropping pattern of women members of FPO's and non-members'**

(n=180)

Cropping pattern	Frequency (Percentage)	
	FPO Members (n <sub>1</sub> =90)	Non members (n <sub>2</sub> =90)
<b>Agricultural crops</b>		
Cereal crops	42 (46.66)	38 (42.22)
Pulse crops	31 (34.44)	39 (43.33)
Oil seeds crop	30 (33.33)	19 (21.11)
Commercial crops	18 (20.00)	12 (13.33)
<b>Horticultural crops</b>		
Flower crops	0.0	0.0
Fruit crops	28 (31.11)	17 (18.88)
Spice crops	39 (43.33)	32 (35.55)
Plantation crops	42 (46.66)	0.0

\* Multiple responses are possible

crops (Banana, Mango, Grapes) and 35.55 per cent were growing spice crops (Ginger, turmeric).

### Relationship between the Socio-Personal Characteristics with Attitude of FPO Women Members

Results from Table 6 explain correlation between the socio-personal characteristics between attitude of FPO women members. With regard to Karnataka FPO women members age (0.274\*\*), family size (0.310\*\*), landholding (0.411\*\*), achievement motivation (0.379\*\*), extension contact (0.414\*\*) and organizational participation (0.273\*\*) were found to be highly and positively correlated with attitude at 1.00 per cent level.

### Relationship between the Socio-Personal Characteristics with Participation of FPO Women Members

Table 7 explains correlation between the socio-personal characteristics between participation of FPO

**TABLE 7**  
**Relationship between the socio-personal characteristics with participation of FPO women members**

Independent variables	'r value'
Age	0.090
Education	-0.146
Family size	0.063
Annual income	0.201 *
Landholding	0.228 *
Experience in FPOs	0.503 **
Achievement motivation	0.242 *
Extension Contact	0.084
Organizational participation	0.137
Risk Orientation	-0.022
Innovativeness	0.344 **
Social media participation	0.316 **

\*\*Correlation is significant at the 0.01, \*Correlation is significant at the 0.05, NS – Non-significant

**TABLE 6**  
**Relationship between the socio-personal characteristics with attitude of FPO women members**

Independent variables	'r value'
Age	0.274 **
Education	-0.107 NS
Family size	0.310 **
Annual income	-0.046 NS
Landholding	0.411 **
Experience in FPO	0.134
Achievement motivation	0.379 **
Extension Contact	0.414 **
Social participation	0.312 **
Organizational participation	0.273 **
Risk Orientation	0.189 NS
Innovativeness	0.156 NS
Social media participation	0.143 NS

\*\*Correlation is significant at the 0.01, \*Correlation is significant at the 0.05, NS – Non-significant

women members. With regard to FPO women members, experience in FPO (0.503\*\*), innovativeness (0.344\*\*) and social media participation (0.316\*) were found to be positively correlated with participation at 1.00 per cent level. Whereas, annual income (0.201\*), landholding (0.228\*), achievement motivation (0.242\*) were found to be positively correlated with participation at 5.00 per cent level.

Results from the Table 8 indicates the multiple linear regression analysis of profile characteristics with attitude of FPO women members. With respect to Karnataka FPO women members, age (2.349\*), landholding (2.547\*), achievement motivation (2.349\*), social participation (2.449\*), organizational participation (2.259\*) were significant with attitude at 5.00 per cent level.

FPO plays a major role in sensitizing women members and making them to realize the importance of women empowerment. The women members gain from

**TABLE 8**  
**Multiple linear regression analysis of profile characteristics with attitude of FPO women members**  
 (n=90)

Independent variables	Karnataka (n <sub>1</sub> =90)		
	Regression coefficient	Standard Error	t value
Age	0.238	0.101	2.349 *
Education	0.187	0.270	0.695
Family size	0.597	0.603	0.990
Annual income	-0.400	2.345	-0.171
Landholding	3.263	1.281	2.547 *
Experience in FPO	1.126	1.015	1.109
Achievement motivation	1.975	0.841	2.349 *
Extension Contact	1.091	0.675	1.617
Social participation	0.951	0.389	2.449 *
Risk Orientation	0.725	0.523	1.388
Innovativeness	0.440	0.421	1.044
Social media participation	1.494	1.154	1.294
R <sup>2</sup> -0.499, F value -5.329			

\*\* Significant at the 0.01, \* Significant at the 0.05,  
 NS – Non-significant

collective wisdom in managing their finances and distributing the benefits among themselves. The FPOs have brought together all the categories of farmers whether big, small or marginal farmers and provided them a platform to share their knowledge in the group. The main objective of FPO is to provide service and benefits to members and make them to improve their socio-economic conditions.

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