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Farmer's Participation in FPO Ecosystem in Eastern Dry Zone of Karnataka

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Abstract
The study was conducted in Bangalore Rural and Chikkaballapur district of Karnataka in the year 2022-23 to study the extent of member's participation in FPO activities. Five FPOs were selected from each district. From each FPO, 10 members were selected. Thus, making a total sample size of a hundred. The participation of members in the FPOs was measured under three main activities viz. functional activities, capacity-building activities and market-oriented activities. The findings of the study revealed that 48.00 % of the FPO members had a moderate level of participation followed by poor (28.00 %) and better (22.00 %) levels of participation in functional activities of FPO. In the case of capacity-building activities, 54.00 % of the FPO members had a moderate level of participation followed by poor (24.00 %) and better (22.00 %) levels of participation. Under marketing activities, 42.00 % of the FPO members had a poor level of participation followed by moderate (39.00 %) and better (19.00%) levels of participation. The results of the overall participation of the members show that more than two-fifths (47.00%) of the members belonged to moderate followed by poor (31.00 %) and better (22.00 %) levels of overall participation

Keywords: *Farmer Producer Organizations (FPOs), Member Participation, Functional Activities, Capacity Building Activities, Market-Oriented Activities*

1.0 Introduction

Every aspect of the economic life in India is influenced by agriculture. Indian agriculture is predominantly characterized by a large number of dispersed and fragmented small holdings. The majority of the farmers in the country are small and marginal farmers. Small and marginal farmers constitute the largest group of cultivators in Indian agriculture; 85 % of operated holdings are smaller than or about two hectares and amongst these holdings, 66 % are less than one hectare (Singh, 2003).

More than 90 % of the small and marginal farmers (SMF) are dependent on rain for their crops. In absolute numbers, there are about 90-100 million small and marginal farmers in India who depend on agriculture for income and employment. Due to this fragmentation and disorganization, it is not economically viable for farmers to adopt the latest technologies, and use seeds of high-yielding varieties and inputs like seeds and fertilizers and agrochemicals etc. The status of farmers can be improved by aggregation of their produce. The aggregation has many benefits and such benefits are it reduces the cost of production, processing and marketing; improves market access; minimises post-harvest losses; it ensures regular supply of produce and quality control; improves access to financial resources against stock and collaterals; mitigates risk, improves bargaining power and builds social capital; it brings in professional management; it has a significant influence on policy to ensure access to funds; it has a cushioning impact on price fluctuation.

Aggregation of agricultural produce can be done by the formation of Self-Help Groups (SHGs), Joint Liability Groups (JLGs), Farmer Producer Organisations (FPOs) and federations. Along with this aggregation, commercialization and diversification of agricultural practices can also improve the status of marginal and small farmers. This can be possibly done by the Collectivization of Producers especially marginal and small farmers into Producer Organizations.

Table 1: Services provided by Farmers' Producer organizations (Source: Rondot and Collion, 2007, Sawairam, 2015)

Sl. No.	Type of services	Particulars of services provided
1.	Organizational services	Organizing farmers, catalyzing collective action, building Capacities, establishing internal monitoring systems
2.	Production services	Input supply, facilitation of (collective) production activities

3.	Marketing services	Transport and storage, output marketing, processing, market information and analysis, branding, certification
4.	Financial services	Savings, loans and other forms of credit, financial management.
5.	Technology services	Education, extension, research
6.	Education services	Business skills, health, production
7.	Welfare services	Health, safety nets

1.1 Status of FPOs in India

Farmer Producer Organizations (FPOs) are farmer collectives composed primarily of small and marginal farmers (around 70 to 80 %). Currently, there are about 7059 FPOs (including FPCs) in the country, that were established over the last 8-10 years under various initiatives of the Government of India (including SFAC), State Governments, NABARD, and other organisations. Karnataka with 578 registered FPOs stands in first place followed by Maharashtra (569) and Madhya Pradesh (550) (Source- Centre of Excellence, COH Bangalore). About 3700 FPOs are registered as Producer Companies, with the rest as Cooperatives, Societies, and other entities. The majority of these FPOs are in the early stages of their operations, with shareholder membership ranging from 100 to over 1000 farmers, and they need not only technical assistance but also adequate capital and infrastructure, as well as market linkages, to sustain business operations.

A congenial ecosystem is a must for the development of Producer Organizations because they have to deal with the most vulnerable part of the agricultural chain, which starts from the farm and goes on to processing and far-away markets. The critical ecosystem services include emergency credit, consumption credit, production credit, retail services of inputs for agriculture and other agricultural production services required by small and marginal farmers. Unless these services are provided by a producer organization. It cannot divert the surplus produce from the local trader or shopkeeper to the producer organization. So, to know farmers' participation in the FPO ecosystem, the present study entitled “Farmer’s participation in FPO Ecosystem in Eastern dry Zone of Karnataka” has been taken.

1.2 Scope of the Study

The present study was undertaken in the Eastern dry Zone of Karnataka which has a concentrated FPO presence to analyse the farmers' participation in the Farmers’ Producer Organization. Therefore, the inferences drawn from this study may apply to other areas where FPOs are operational. The study will also be helpful to the Government, SFAC, administrators and policymakers in judging the farmers' participation in FPOs. This shall be helpful to make

FPOs efficient, effective, and profitable for the farmers and shareholders and for developing strategies to reach the unreached. The findings of this study will be immensely useful to the agencies and personnel directly or indirectly engaged in the planning, implementation, and promotion of FPOs.

2.0 Literature Review

A thorough review of literature on the topic under investigation would provide a deep insight into the subject which is inevitable for rigorously performing the research study. A review of the literature helps to acquire a broad and general background in the given field of discipline. An acquaintance with earlier pertinent studies has been felt necessary to develop a good understanding of the research study and to formulate an appropriate research methodology.

Stewart (1997) studied the economic empowerment of women Producer Organisations in India. He found that stable income earned by Producer Organisations is vital for participation in the organisation. A portion of their earnings will be used for their children's education, thus affecting their personal lives.

Bruynis et al. (2000) executed an empirical survey with 52 American marketing cooperatives and distinguished eight keys for improved farmers' participation in terms of longevity, business growth, profitability and member satisfaction. Among them, implementation of a management training process, employing an experienced full-time general manager, regularly distributing accurate financial statements among the management team and utilizing human resources appeared to be significant for the researched organisations in achieving success.

Bingen et al. (2003) analysed different approaches to human capital development. Among them, linking farmers to markets was the main approach. In addition, the strength and unity that comes from cooperating and working together who generally lack the skills, knowledge and experience were the key factors to participate in the market. 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

Hellin and Higman (2003) analysed coffee producers in South America. They opined that the success stories of Farmer Organisations lead to active and effective farmer participation in value chains. MI industry in India is one of them and in this, more than 70 % of India's milk is produced by households who own only one or two milch animals and these producers form part of a nationwide network of dairy cooperatives. Prasad (2004) studied the participation of partners in agricultural research-extension and farmers linkage mechanisms in Krishna Godavari Zone of Andhra Pradesh. He concluded that the majority (61.60%) of the respondents had high participation, followed by medium (36.80%) and low (1.60%) participation.

Raghavendra et al. (2005) revealed that the majority of the respondents (70.66%) had a medium knowledge level about cultivation practices, followed by low (18.00%) and high (11.34%) levels of knowledge. Whereas, 71.30 % of respondents had medium knowledge with respect to post-harvest technologies followed by low (20.00%) and high (8.70%) knowledge levels respectively. Mercoiret and Mfouou (2006) placed a strong emphasis on the promotion of Farmers Organisations (FOs) to facilitate farmer access to inputs, credit, output markets and technical support through training and to increase participation in policymaking and strengthen cooperation within the agricultural sector to bring about a smallholder revolution.

Badal et al. (2006) employed the Participation Index to determine the extent of participation of farmers in Watershed programmes and also used the Tobit model to analyse the factors determining their participation. The results revealed that only 44% and 26% of the farmers participated in the different activities at the planning and implementing stages respectively. The study highlighted that the socio-economic variables like the age of the household head, training given to the farmers, operational holdings, visit of extension agents, the efficiency of the institutions and non-farm income had significantly contributed to engagement in the watershed activities.

Esham and Usmi (2007) assessed the level of farmers' participation in FPO. The study revealed that there were both active and passive shareholders with a moderate level of participation of 55 % in different commercial activities. The yearly meetings of the FPO also have participation levels ranging from 59 % & 21 % among the active and passive shareholders respectively. Most of the members viewed the organisation merely as a service provider rather than a profit-oriented organisation.

Therefore, they did not anticipate the dividends amounting to their shares of FPO. Participation from the non-governmental institutions was confined to 10 %. Only 31 % of the farmers had complete knowledge regarding the role and different activities of the FPO. The survey concluded that the level of satisfaction among the farmers in irrigation management and market-oriented agriculture was 74 % and 29 % respectively. Bhagyavathi et al. (2008) observed that the majority of farm women fell under the medium participation category (52.50%) followed by high (30.83%) and only 16.67 % belonged to the low category.

Bernard and Spielman (2009) analysed the determinants and the extent of participation of farmers in rural producer organisations. It was found that economically weaker sections of farmers were denied the membership of POs in Ethiopia. The results showed that only 9 % of smallholders were members of rural producer organisations and only 40 % of total farmers had access to such organisations. Socio-economic variables like age of the household head, education and landholdings were found to be significant at 1 %. It has also been observed that in some parts of Ethiopia, where farmer participation was increased by up to 8 %, determining variables were education and landholdings. The study suggests that farmer education and credit support would increase the number of rural producer organisations in the country.

Priya (2010) concluded that 48.30 % of the respondents had medium participation in Farmer Field Schools (FFS) whereas, 29.20 % and 22.50 % of them had high and low participation respectively. Kebede (2011) studied cooperatives in Ethiopia and concluded low women's participation in the management board, control committee and other affairs of the cooperatives. Whereas, the highest participation was observed in milling, cashier and storekeeping activities.

Ampaire et al. (2013) study on Rural Producer Organizations (RPOs) in Uganda concluded that the capacity-building programmes provided to RPO leaders were inadequate and usage of these services by farmers was also low. Leite et al. (2014) analysed Producer Organisations (POs) in Brazil and revealed that POs operating other than the biofuel industry were capable of linking farmers to markets. However, the lowest participation of farmers was observed in POs operating in biodiesel markets due to organization-specific characteristics and current farm activities, etc. Sawairam (2014) studied linkages in the value chain of FPOs and concluded that the farmers benefitted after becoming members through a wide range of services provided by FPOs and services were related to marketing, finance, technology, production and welfare.

Tolno et al. (2015) used the Probit model to assess the factors responsible for the membership of FPOs in New Guinea. Selection bias of the sample farmers was avoided by employing Heckman's two-step procedure and incorporating the inverse Mill's ratio to the model before computing the auxiliary probit regression. The results revealed that membership directly increased with the age of the household head. Per unit increase in the independent variables like age, education of the farmer, farm size, extension service, and access to credit increased the members' participation by 0.59 %, 1.3 %, 4.96 %, 38.34 %, and 27.16 % respectively. In the patriarchal system of society, the cultivation of potatoes was largely considered a female activity. Therefore, the participation of male farmers was found to be 16.19% less than their female counterparts.

Ogbonna and Nwaobiala (2015) evaluated participation and poverty levels of the national FADAMA - 3 development project on rural farm women in Gombe state, Nigeria. The result showed that participated rural farm women were actively involved in crop and livestock sub-component technology development with mean ratings of 2.79 and 2.69 respectively. The study therefore recommends that timely support of farm inputs by the project to the farmers, prompt payment of counterpart funds by relevant agencies and replication of the project to other communities to reduce rural poverty in the state.

Babu and Patoju (2018) concluded that for the services like marketing, value addition, technological and pre-harvest services provided by FPC, farmers' participation and satisfaction were good. But, for agricultural advisory services, capacity building and credit access services, participation and satisfaction were poor. Singh and Vatta (2019) assessed the economic impacts of Farmer Producer Organizations in Gujarat. They reported that 39 % of member farmers utilized the storage facilities provided by the FPOs. The percentage of member farmers utilizing processing, extension, input and credit support services were found to be 36.50 %, 67 %, 48.50 % and 44.50 % respectively.

Paul et al. (2019) analysed the extent of participation of member farmers in contract farming in the Hooghly district of West Bengal. They reported limited participation of small farmers in contract farming and opined that the probable reason for this low participation was due to the stringent restrictions imposed by the contracting agencies.

3.0 Methodology

The study was conducted during 2022-2023 in Bangalore Rural and Chikkaballapur district of Karnataka state. Two districts, Bangalore Rural and Chikkaballapur districts were selected purposively to bring a contrast between two areas showcasing the extremes. Five FPOs from each of the districts were selected. The below table shows the list of 10 FPOs selected for the study.

Table 2: List of FPOs Selected for the Study

Sl. No.	District Name	Name of the FPO
1.	Bangalore Rural	Sulibele FPC Ltd.
		Gangadevi HFPC Ltd.
		Nandagudi FPC Ltd.
		Rajaghatta HFPC Ltd.
		Tubugere HFPC Ltd.
2.	Chikkaballapur	Sri Amaranarayana HFPC Ltd.
		Kalpavruksha FPC Ltd.
		Ambajidurga FPC Ltd.
		Adarsha Chetana FPC Ltd.
		Boga nandeeshwara FPC Ltd.

In both the districts, from each FPO, 10 members were selected randomly to assess the extent of participation in FPO activities and were interviewed using a pre-tested interview schedule. Keeping in view the nature of the study, an ex-post facto research design was adopted for the study. This was considered appropriate because the phenomenon had already occurred.

4.0 Discussion

The participation of members in the FPOs was measured under three main activities. The activities include (1) Functional activities, (2) Capacity Building activities, and (3) Market-oriented activities. Finally, the overall participation was measured using the combined score of all three activities.

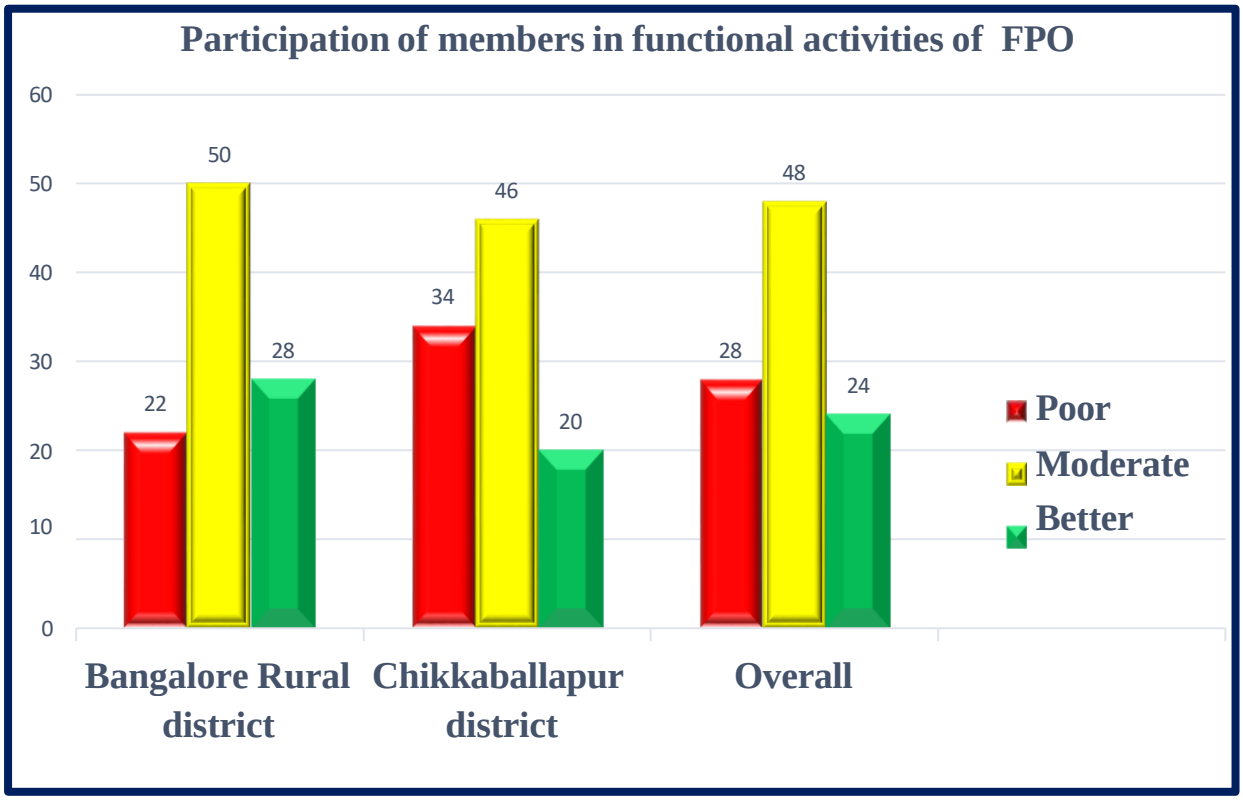
A. Functional activities

It is noticed from Table 3 that, 50.00 % of the FPO members of Bangalore Rural district had a moderate level of participation followed by better (28.00 %) and poor (22.00 %) level participation in functional activities of FPO. Whereas in the Chikkaballapur district, 46.00 % of the FPO members had a moderate level of participation followed by poor (34.00 %) and better (20.00 %) levels of participation in functional activities of FPO.

Table 3: Extent of Members' Participation in Functional Activities of FPO

Activities	Category	Bangalore Rural district (n1=50)		Chikkaballapur district (n2=50)		Overall (n=100)	
		f	%	*f*	%	*f*	%
Functional activities Mean = 27.41 SD = 7.89	Poor (< 23.46)	11	(22.00)	17	(34.00)	28	(28.00)
	Moderate (23.46 – 31.35)	25	(50.00)	23	(46.00)	48	(48.00)
	Better (> 31.35)	14	(28.00)	10	(20.00)	24	(24.00)

Figure 1: Extent of Members' Participation in Functional Activities of FPO



The FPO has conducted a good number of meetings to convey the rationale behind the formation of the FPOs. The creditability of information for farmers regarding the advantages of FPOs has a direct effect on the farmers. The educational activities conducted by FPOs in the area before the establishment of the FPOs have enabled the FPO members to acquire knowledge regarding the advantages of the FPOs. These are the reasons for FPO members to take an active part in the formation of FPOs. These findings are similar to the findings reported by Sayanolla (2002), Chethana (2005), Yekinni (2010), Suchithkumar (2011) and Gopala (2010).

B. Capacity Building activities

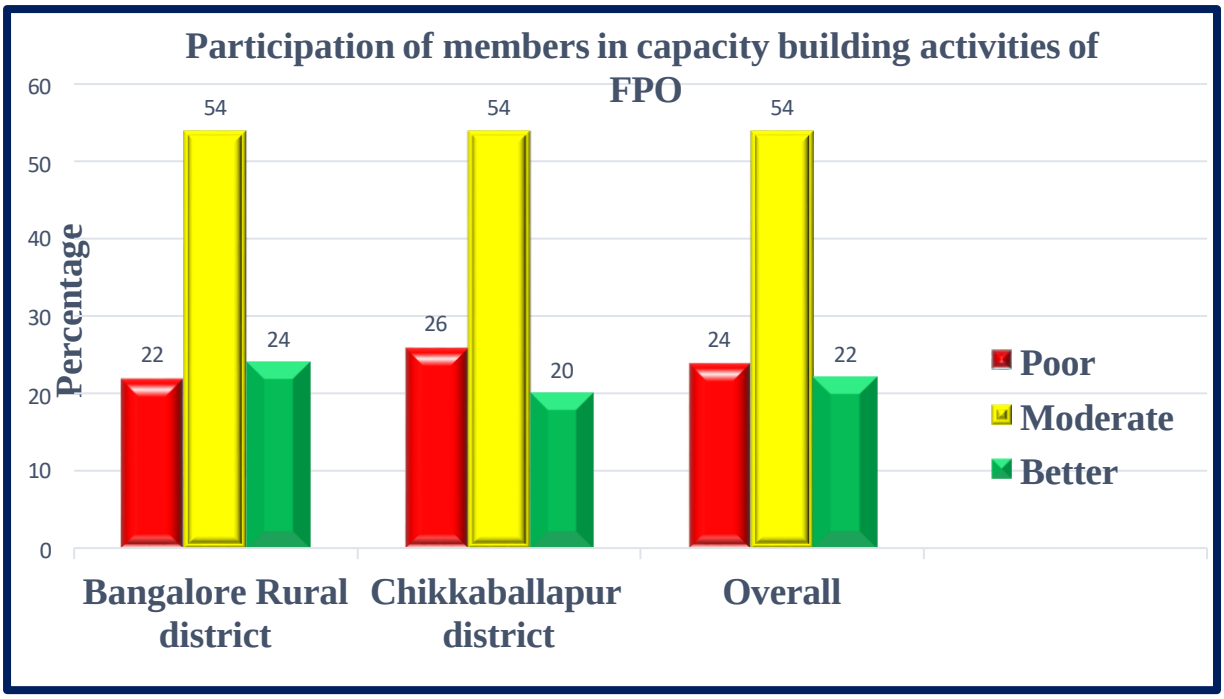
It is evident from Table 4 that, 54.00 % of the FPO members of Bangalore Rural district had a moderate level of participation followed by better (24.00 %) and poor (22.00 %) level participation in Capacity Building activities. Whereas in the Chikkaballapur district, 54.00 % of the FPO members had a moderate level of participation followed by poor (26.00%) and better (20.00%) levels of participation in Capacity Building activities.

A good number of training programmes were organized by FPO on crop production, animal husbandry, IPM, IDM, INM, processing and value addition, marketing and personality development of FPO members. The FPO members have actively participated in the training programmes. Hence, a greater number of FPO members had a moderate level of participation in training programmes. A similar type of results was reported by Kusumanjali (1996), Subhash Chandra (2002) and Augustine and Paul (2012).

Table 4: Extent of Members' Participation in Capacity Building Activities of FPO

Activities	**Category**	**Bangalore Rural district (n1=50)**		**Chikkaballapur district (n2=50)**		**Overall (n=100)**	
		f	**%**	***f***	**%**	***f***	**%**
Capacity Building activities	Poor (< 8.33)	11	(22.00)	13	(26.00)	24	(24.00)
	Moderate (8.33 – 11.33)	27	(54.00)	27	(54.00)	54	(54.00)
Mean = 9.83 SD = 3.01	Better (> 11.33)	12	(24.00)	10	(20.00)	22	(22.00)

Figure 2: Extent of Members' Participation in Capacity Building Activities of FPO



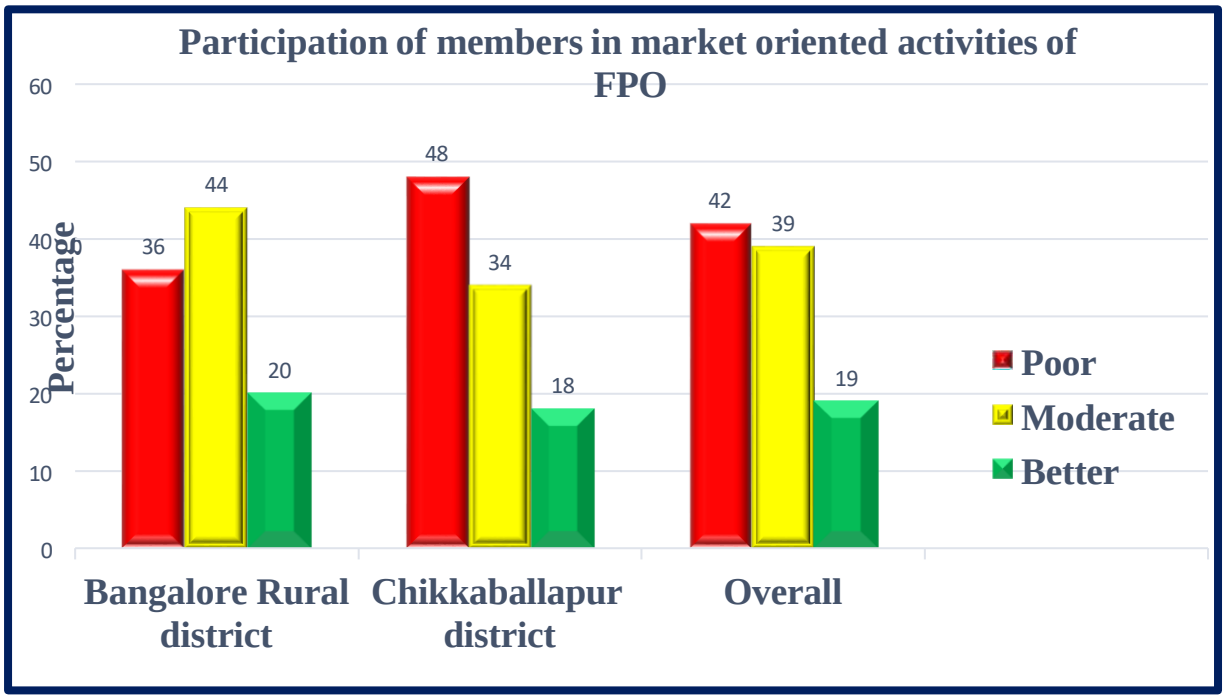
C. Market-oriented activities

It is evident from Table 5, that 44.00 % of the FPO members of Bangalore Rural district had a moderate level of participation followed by poor (36.00 %) and better (20.00%) level participation in market-oriented activities. Whereas in the Chikkaballapur district, 48.00 % of the FPO members had a poor level of participation followed by moderate (34.00%) and better (18.00 %) levels of participation in market-oriented activities.

Table 5: Extent of Members Participation in Market-oriented Activities of FPO

Activities	**Category**	**Bangalore Rural district (n1=50)**		**Chikkaballapur district (n2=50)**		**Overall (n=100)**	
		f	**%**	***f***	**%**	***f***	**%**
Market oriented activities **Mean = 19.87** **SD = 5.89**	Poor (<16.93)	18	(36.00)	24	(48.00)	42	(42.00)
	Moderate (16.93 – 22.81)	22	(44.00)	17	(34.00)	39	(39.00)
	Better (> 22.81)	10	(20.00)	9	(18.00)	19	(19.00)

Figure 3: Extent of Members Participation in Market-oriented Activities of FPO



Most of the FPO members are small and marginal farmers and are having many marketing problems with limited quantity of produce that continue to persist. Besides, transportation and handling of such a small quantity of produce to the market has resulted in increased marketing costs which was not viable for most of the members before they became members of FPOs. Hence, most of the members had a poor level of participation in the marketing activities of the FPOs.

Overall participation in FPO activities

Table 6 depicts that, 50.00 % of the FPO members of Bangalore Rural district had a moderate level of participation followed by poor (26.00 %) and better (24.00 %) levels of overall participation in activities of FPOs. Whereas in the Chikkaballapur district, 44.00 % of the FPO members had a moderate level of participation followed by poor (36.00 %) and better (20.00%) levels of overall participation in activities of FPOs respectively.

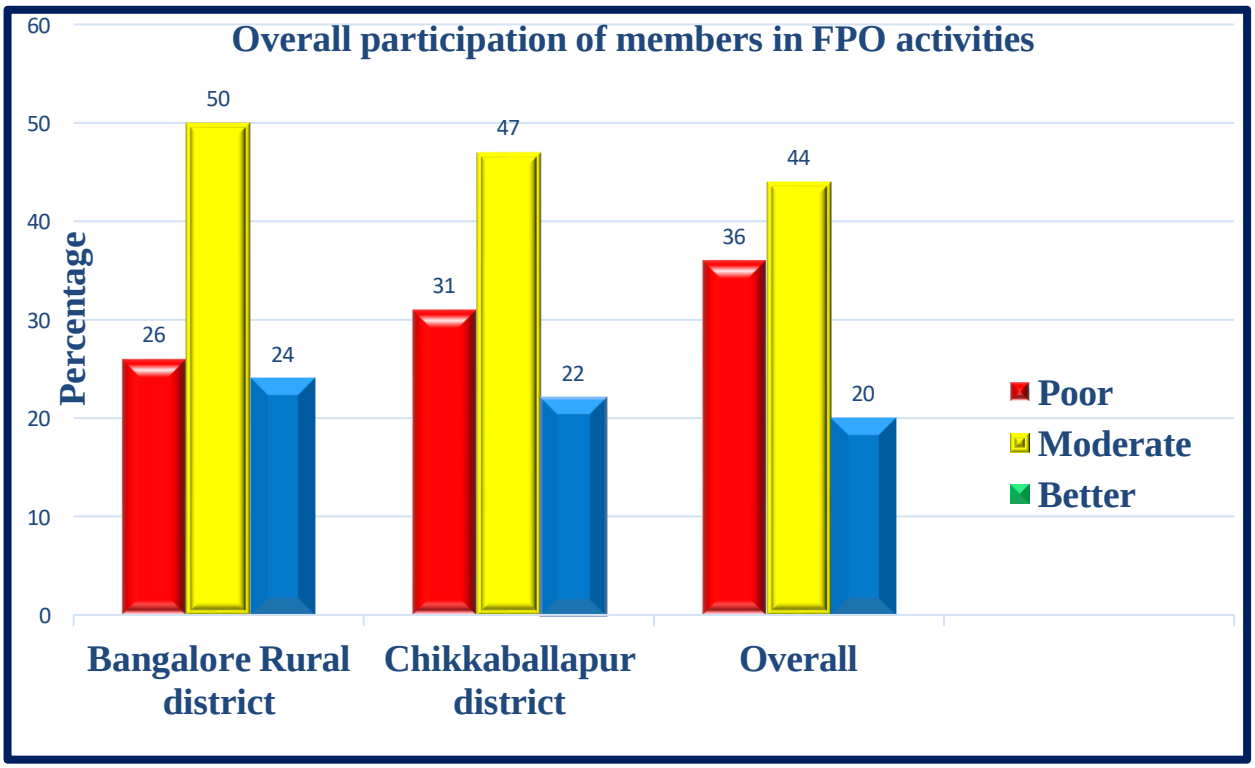
Table 6: Overall Participation of Members in FPO Activities

Activities	Category	Bangalore Rural district (n1=50)	Chikkaballapur district (n2=50)	Overall (n=100)

		f	%	*f*	%	*f*	%
Overall participation Mean = 57.11 SD = 9.81	Poor (< 52.21)	13	(26.00)	18	(36.00)	31	(31.00)
	Moderate (52.21 – 62.01)	25	(50.00)	22	(44.00)	47	(47.00)
	Better (> 62.01)	12	(24.00)	10	(20.00)	22	(22.00)

The reason for more FPO members having a moderate level of participation in the activities of FPOs may be due to the higher level of benefit they derived due to their participation in FPOs. The results agree with the findings reported by Kusumanjali (1996) in her study on the participation of tribal women in integrated tribal development agency programmes in AP.

Figure 4: Overall Participation of Members in FPO Activities



5.0 Conclusion and Recommendation

The study on the members' participation in FPO activities was carried out from November 2022 to April 2023 in Bangalore Rural and Chikkaballapur districts of Karnataka, India to assess the extent of members' participation in FPO activities. The result implies that the extent of members' participation in FPO activities in Bangalore Rural district is relatively higher compared to Chikkaballapur district. Therefore, there is scope for encouraging the members' participation in Chikkaballapur district as well as Bangalore Rural district, by providing technical assistance on

the aggregation of agricultural produce, disseminating market information, marketing to institutional buyers, participation in commodity exchanges, export and value addition.

6.0 References

Angba, A. O., & Itari, P. (2012). Socio-economic factors influencing farmers' participation in community development organizations in Obubra local government area of Cross River State, Nigeria. Canadian Social Studies, 8(1), 54-59.

Chethana, M. P. (2005). Impact of Stree Shakti programme on farm women in Tumkur district. (Unpublished master's thesis). University of Agricultural Sciences, Bangalore, Karnataka.

Gopala, Y. M. (2010). Knowledge and adoption of participant and nonparticipant maize growers of farmers field schools in Chickaballapur district of Karnataka. (Unpublished master's thesis). University of Agricultural Sciences, Bangalore, Karnataka.

Kusumanjali, V. (1996). Participation of tribal women in IFAD funded integrated tribal development agency programmes. Journal of Research, ANGRAU, 22(4), 180.

Sayanolla, K. R. (2002). A study of impact of Jankidevi Bajaj Gram Vikas Sansthan on the beneficiary farmers of Maval and Khed talukas of Pune district. (Unpublished master's thesis). Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra.

Singh, B. H. (2003). Community forest management and farmers field schools. LEISA India, 5(1), 14-16.

Subhash Chandra, J. (2002). Study on knowledge, attitude and adoption of watershed management practices by the farmers of Mungasavilligulya watershed. (Unpublished master's thesis). University of Agricultural Sciences, Bangalore, Karnataka.

Suchithkumar, K. M. (2011). A study of participation of members of jackfruit growers' association in Bangalore rural district of Karnataka. (Unpublished master's thesis). University of Agricultural Sciences, Bangalore, Karnataka.

Yekinni, O. T. (2010). Women's participation in development programs and food security status. Journal of Agricultural and Food Information, 11(1), 28-35.