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A study on performance of Farmer Producer Organizations (FPOs) in Kalaburagi District of Karnataka

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Abstract

Farmers Producer Organizations (FPOs) are groups of rural producers who bond together to form organisations in order to pursue specific common interests of their members, such as developing technical and economic activities that benefit their members and maintaining relationships with partners in their economic and institutional environment. The impact of successful FPO on farmer's life is not realised at its full potential. Most FPOs have failed to deliver their goal but many FPOs are performing well and improving the socio-economic condition of farmers. Hence, this paper showcases the performance of selected FPOs in Kalaburagi district that are aiding farmer's welfare. For this purpose, five functioning FPOs from Kalaburagi district were selected. The results showed that most of the FPOs (47.20%) were having an average level of performance, followed by better (27.20%) level of performance. However, there is scope for remaining FPOs which lagged in credit services, insurance provision and infrastructure can improve their performance by providing improved services to farmers. Further, NGO promoted FPOs were found performing better than the FPOs promoted by Horticulture department in several key aspects. The results highlights that there is a need for strengthening managerial capacity, infrastructure, institutional support and credit provisions to ensure the long-term sustainability and effectiveness of FPOs in improving the farmers' livelihood.

Keywords: Farmers Producer Organizations (FPOs), Performance, Horticulture department, NGOs

Introduction

Small and marginal farmers play a crucial role in Indian agricultural growth and food security, yet they face significant challenges such as limited resources, poor access to modern technology and weak market linkages. These farmers are illiterate and have a limited understanding of the value of good seeds and other agricultural inputs (Chauhan, 2015)^[2]. Individually, these farmers struggle to secure fair prices and are unable to benefit from economies of scale. To address these issues, collective approaches like cooperatives and contract farming were introduced. However, while some sectors like dairy and poultry have seen success, many such initiatives fail due to weak organizational structures and lack of sustainability.

To strengthen collective action, the concept of Farmer Producer Organization (FPOs) was introduced following the recommendations of the Y.K. Alagh Committee in 2003^[1]. FPOs are farmer-led, legally registered entities formed to carry out business activities related to agricultural production, processing and marketing. They provide end-to-end support and services including input supply, technical guidance, financial assistance, processing and market access. By aggregating produce and resources, FPOs enhance farmers' bargaining power, reduce transaction costs and improve income opportunities, especially for small and marginal farmers.

FPOs combine strengths of cooperative principles with the efficiency of corporate structures, functioning as hybrid organizations. They operate on democratic principles such as "one member, one vote" and ensure transparency and equitable profit distribution. The main objective of the FPOs were to eliminate the middlemen from taking away highest share in marketing channels. Farmers were directly paid according to the prevailing market rates after deducting

part of the amount for the reserve fund of FPOs (Deepa *et al.*, 2018) [3]. Their functions extend across financial services, input supply, procurement, processing, marketing, insurance, technical advisory and networking. Institutional support from organizations like NABARD and the Small Farmers Agribusiness Consortium (SFAC) has been instrumental in promoting and strengthening FPOs through funding, capacity building and market linkages (Nalini *et al.*, 2017) [6]. A significant investment in capital infrastructure to create the supply chain, agribusinesses need reliable, continuous, and enough supplies of produce on a regular basis. As a result, agribusinesses are increasingly seeking direct relationships with farmers to get the agricultural products they demand (Murray, 2009) [5].

Despite their potential, many FPOs still face challenges in achieving long-term sustainability due to issues like limited managerial capacity, inadequate infrastructure and weak market integration. In India, there are currently 3200 FPOs in operation. The state of Karnataka has 318 FPOs (www.sfacindia.com) that are being promoted by institutions such as NGOs and government departments. The Kalaburagi district has 24 FPOs. However, since these organizations are relatively new, there is a need to assess their performance to evaluate their effectiveness and to develop strategies for improving their impact on farmers' livelihoods. Hence, this paper is aimed to assess the performance of FPOs in the Kalaburagi district.

Methodology

The present investigation was carried out in Kalaburagi district of Karnataka state during 2020-2021. Ex-post facto research or after-the-fact research, which is a type of research design where the study begins after the events or conditions have already occurred, without any manipulation or intervention by researcher, was employed. Because this research design is a non-experimental approach used to explore possible cause-and-effect relationships by analysing existing conditions. Kalaburagi district was purposively selected as it is one of the front running districts in the FPO program in Karnataka. The major NGOs namely Vrutti Livelihood Resource Center (VLRC), Mysore Resettlement and Development Agency (MYRADA) and the Department of Horticulture are actively involved in promotion of FPOs.

The criteria followed to select FPOs was that the FPO should have been completed minimum of three years of its function and should be registered under Companies Act 2013. Presently Karnataka state has 318 FPOs of which 22 FPOs are operating in Kalaburagi district. Five actively functioning FPOs viz., Nisarga Krushikara Producer Company Limited (NKPCL), Rohini Krushikara Producer Company Limited (RKPCL), Balabheemasena Krushikara Producer Company Limited (BKPCL), Negilayogi Horticulture Farmer Producer Company Limited (NHFPCL) and Grameena Horticulture Farmer Producer Company Limited (GHFPCL) were purposively selected for the study, three each promoted by NGO, Vrutti Livelihood Resource Centre and remaining two each promoted by state department of Horticulture.

To measure the performance of the FPO, the procedure followed was developed by NABARD (National Bank for Agriculture and Rural Development) with suitable modification, consultation with experts, POPIs (Producers Organizations Promoting Institutions) of the FPOs promoters and previous studies on FPO. This procedure consisted of 25 performance indicators. Under each criterion, members of the groups were asked to indicate the level of performance of their group. Some of the

indicators were assessed by looking into the different records maintained by the organization. Under each indicator four related statements were framed and scoring was assigned to each statement as 0 to 3. The maximum and minimum score that may be obtained by each group was 75 and 0 respectively. Thus, after computing performance score, the FPOs were grouped into low, medium and high-performance categories by taking the mean and half standard deviation as a measure of check.

Performance category

Sl. No.	Category	Criteria	Score
1.	Poor	Less than (Mean – ½ SD)	Less than 36.29
2.	Average	Between (Mean ± ½ SD)	Between 36.29 – 42.03
3.	Better	More than (Mean + ½ SD)	More than 42.03

Further, the results were analysed using chi-square to find out relationship between the FPOs promoted by NGO and Horticulture department using the formula,

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i}$$

Where, O_i – Observed value; E_i – Expected value

Results and Discussion

Indicator wise performance of FPOs

As observed in the Table 1, there are twenty-five indicators have been considered under the performance of FPOs each indicator was analyzed using frequency and percentage. Data in table 1 indicate the performance of five FPOs with respect to the twenty-five indicators viz., rules and regulations for the FPO, credit service, percentage of loan offered to members, internet services, rotation of executive body, conduct of meeting, auditing of accounts of FPO, training programmes organized, 'planning, implementation, monitoring and evaluation programmes', attendance of the members for meeting, insurance service, backward linkage (input supply), training programmes attended, market linkage, dissemination of market information, aggregation and storage of produce/input, primary processing (drying, cleaning and grading), custom hiring service, participation of members in decision making, participation of members in responsibility sharing, book keeping and documentation, sanctioning of loans, loan repayment, attitude of members towards FPO and its activities and team spirit among the group members. Under each indicator four statements were analysed by using frequency and percentage.

Pertaining to the first indicator rules and regulations for the FPO, Cent per cent of the respondents expressed that the rules and regulations of the FPOs exists which being known by all the members and Board of Members and rules and regulations are being followed without any penalties.

Under the credit services, it was observed that, almost half (44.00%) of the respondents expressed that the credit services were being provided based on members' decision and their needs, more than 41.60 per cent of the respondents expressed that no credit service is available in the FPO, followed by 14.40 per cent of the respondents expressed that the credit service is demand based.

With respect to the third indicator, percentage of loan offered to members as depicted in the Table 1. It was visualized that more than half (58.40%) of the respondents were found to be experienced that less than twenty-five per cent of the members were offered loan services among their total members of the

FPOs and remaining 41.60 per cent of members expressed that no members were being provided with loan services.

Regarding the internet services, it was visualized that more than half (64.80%) of the respondents had expressed that their FPOs were equipped with no internet connection as well as computer along with operating staff. Nearly 21 per cent of the respondents opined that their FPOs were equipped with computer along with operation staff with internet services available all the time and 14.40 per cent of the respondents expressed that their FPOs were possessing computers but they lack with the operating staff.

In terms of the rotation of executive body, it was found that 16.00 per cent of the FPOs were having fixed time period for the rotation of the executive body, almost half (44.80%) of the FPOs were not having certain fixed time period for rotation of executive bodies whereas 39.20 per cent of FPOs were having the executive body rotation only when required.

With respect to the conduct of meeting more than half of the FPOs (54.40%) were not organizing meetings regularly which means less regular meetings organized, followed by 20.80 per cent of FPOs were having regular conduct of meetings, 17.60 per cent of FPOs were having more irregular meetings and 7.20 per cent of the FPOs were having no fixed date and time for the conduct of meetings. This might be because very less members are involved in the decision making and responsibility sharing aspects of FPOs.

Regarding auditing of accounts of FPOs, it was found that about 84 per cent of FPOs were getting done their auditing every year, and few (15.20%) FPOs were used to get their auditing done when it is required other than every year. This might be because the FPOs are working under the NGO and Dept. of Horticulture which expects FPOs to maintain their audits yearly and it is necessary for the well-functioning of the FPOs.

Regarding book keeping and documentation, as depicted in the Table 1 it's been visualized that cent per cent of the FPOs have all books are up to date: and correctly maintained and regularly audit has been done.

In the context of the training programmes organized, it's been visualized that more than half (59.20%) of the FPOs were found to have conducted more than five training programmes followed by 21.60 per cent of the FPOs had organized three to five training programmes for their members and 19.20 per cent of the FPOs had organized less than three training programmes. This might be because of the fact that the one of the prime roles of FPOs is to organize training programmes for their members with respect to specific technical knowledge, hence the majority of the FPOs are full filing their prime objectives. As concerned to the planning, implementation, monitoring and evaluation programmes, it is visualized that more than half (65.60%) of the FPOs were irregular in such activities with fifty per cent of the members involved, 23.20 per cent of the FPOs were irregular in such activities with fifty per cent of the members involved, and 11.20 per cent FPO were having zero members involved in such activities. It might be because the majority of members are not involved in official as well as responsibility sharing activities of the FPOs, majority of the prime role of the FPOs are handled by the officials of the FPOs.

With respect to the attendance of the members for the meeting, slightly less than half of the FPOs have less than fifty per cent of the members attending for the meeting while 38.40 per cent of FPOs have fifty to seventy-five per cent of the members attending for the meeting, followed by 18.40 per cent of the FPOs are having 75 to 90 per cent of the member's attendance for the meetings conducted by FPOs. This was probably because of the fact: that majority of the members are less involved in the

activities and still FPOs are not fully fledged with all the facilities and majorly working under their sponsoring organizations. Insurance services, cent per cent of the FPOs are not providing any such facilities, it might be because of the fact that there are other insurance companies which are certainly focused on insurance policies and it was, observed that FPOs don't consider providing insurance services as their prime objectives.

In terms of the backward linkage (input supply), 44.80 per cent and 41.60 per cent of the FPOs were providing best and good quality inputs on /before onset of sowing operations respectively and 13.60 per cent of FPOs are providing average input supply to the members of the FPOs. This was probably because establishment of the FPOs is to provide inputs to the members at the reasonable and subsidized rates and it is also one of the major roles of the FPOs, hence, keeping strong backward linkages is the basic for good performance of the FPOs.

Training programmes attended, it was found that more than half (54.40%) of the respondents have attended more than 75 per cent of the training programmes organized by the FPOs, followed by 21.60 and 17.60 per cent of the respondents have attended 50 to 75 and 50 per cent of the training programmes organized by the FPOs respectively. The remaining 6.40 per cent of the respondents have not attended any training programmes organized by the FPOs respectively. Attending training programmes enhances the skills as well as technical knowledge of the participants and respondents find it to be useful for their cropping practices hence majority of the respondents have good amount of interest in attending the training programmes organized by FPOs.

Market linkage, most (46.40%) of the FPOs have favourable market linkages which exists for few crops. This is because the study area consists majority of the pulse based FPOs and farmers are also pulse growers, hence the market linkages exist for these crops only in some FPOs. about 34 per cent of the FPOs are having poor market linkages and 19.20 per cent of FPOs are having good market linkages which exists for all crops respectively. Yet some FPOs moving forward to gain strong market linkages for all crops to benefit their members.

Regarding dissemination of market information, most (47.20%) of the FPOs were having accurate and timely dissemination of market information, 34.40 per cent of the FPOs were having timely but not accurate and 18.40 per cent of the FPOs were having accurate but not timely dissemination of market information. As majority of the FPOs are having good market linkage, the dissemination of market information is also accurate and timely for majority of the FPOs.

With respect to aggregation and storage of produce and inputs, most (44.80%) of the FPOs had poor godown facility, 36.80 per cent of the FPOs were having average level of godown facility to store the produce/inputs and 18.40 per cent of the FPOs were having no godown facility to store the produce.

Regarding primary processing units, as depicted in the Table 1, it's been visualized that for most (42.40%) of the FPOs were provided with the average kind of primary processing units for drying cleaning and grading followed by 18.40 and 39.20 per cent of the FPOs were found to be having poor and no primary processing services, respectively. With respect to custom hiring services, it was observed that, more than half (58.40%) of the FPOs were having custom hiring services available, with few equipment available for members, followed by 41.60 Per cent of FPOs are having no custom hiring services for the benefit of members. This might be due to the majority of the FPOs in the study area are functioning under NGO and are not fully

established with all the facilities available and FPOs are yet to establish such facilities to be availed in their FPOs.

Taking to the account of the participation of members in decision making, it was observed that less than half of the members (45.60%) responded that the issues were understood by the representatives or the promoters and some members who also influence decision making, 36.80 per cent of the respondents expressed that understanding issues and decision making is limited to the representatives and one or two members and 17.60 per cent of the members responded that there is high dependency on the promoters for the decision making respectively.

Participation of members in responsibility sharing, it's been found that less than half (45.60%) of the members had responded that the responsibility was shared among few members of the FPOs, 37.60 per cent of the members responded that some people take the responsibility or depend on the staff or promoters and 16.80 per cent of the members shared that there is high dependence on promoters or staff members for the responsibility sharing respectively. It was found almost similar results for the both participation of members in decision making and participation of members in responsibility sharing.

About sanctioning of loans, it's been found, that more than half (58.40%) of the FPOs have sanctioned less than 50 per cent of the loan to the members, followed by 41.60 per cent of FPOs have no such facility to benefit the members. Regarding loan repayment, out of the FPOs which have provided loan to the members, more than half (58.40%) of the FPOs have documented that 70 to 90 per cent of the loan repayment has been done by members.

Attitude of members towards FPO and its activities, it's been observed that almost half (43.20%) of the FPOs were found to be having 75 to 90 per cent of the respondents expressing favourable attitude towards activities of FPOs, followed by 30.40 per cent of the FPOs were found to be having more than 90 per cent of the members expressing favourable attitude, while 26.40 per cent of FPOs were found to be having 50 to 75 per cent of the respondents expressing favourable attitude towards activities of FPOs.

Team spirit among the group members, most (43.20%) of the respondents found to be having good level of team spirit among them, 38.40 per cent of members were found to be having average level of team spirit among the members and 9.60 and 8.80 per cent of the members were found to be having poor as well as excellent team spirit among the group members respectively. This might be because majority of the respondents were found to be having favourable attitude towards activities of FPO and majority of the members were found to be having medium level of perception towards the functioning of FPOs.

Overall performance of Farmer Producer Organizations

It is clearly observed, from the Table 2, that 47.20 per cent of the FPOs were having average level of performance, 27.20 per cent of FPOs were having better level of performance and about one fourth (25.60%) of the FPOs were found to be having poor level of performance respectively.

The probable reason for this might be that most of the FPOs are good at their prime objectives like input supply, market linkages, dissemination of market information, providing custom hiring services, maintaining rules and regulations, auditing of accounts, conduct of meetings and organizing training programmes these have added in performance of the FPOs in having average and better level of performance. Some of the FPOs were found to be having poor level of performance since, some of the FPOs are

not fully equipped with all the required facilities such as custom hiring services, credit facilities, insurance services and involvement of members in decision making and responsibility sharing activities of FPOs. The results obtained are in line with the findings of Eswarappa *et al.*, (1999) [4].

Difference between NGO promoted FPOs and State Horticulture Department promoted FPOs

The results presented in the table 3 explains the difference between NGO promoted FPOs and State horticulture department promoted FPOs with respect to the eleven indicators viz., credit service, percentage of loan offered to members, conduct of meeting, training programmes organized, attendance of the members for the meeting, backward linkage, market linkage, dissemination of market information, aggregation and storage of produce/input, primary processing and custom hiring services. With regard to credit services provided at FPOs, as shown in the table 3, it can be clearly observed that 73.34 per cent of the NGO promoted FPOs had provided credit service based on member's decision and hundred per cent of FPOs promoted by State horticulture department had no credit service facilities available for their members. Hence, the statistical results indicate a significant difference at five per cent level between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard to credit services provided by FPOs. With respect to the per cent of loan offered to the members, 97.33 per cent of NGO promoted FPOs had offered loan to less than twenty-five per cent of its members and hundred per cent of FPOs promoted by state horticulture department State Horticulture Department had not offered loan to any of its members. Hence there exists a significant difference at five per cent level: between NGO promoted FPOs and state horticulture department promoted FPOs with regard to percentage of loan offered to the members.

Related to the conduct of meetings, the table 3 implicate that 56 per cent of NGO promoted FPOs and 52 per cent of State Horticulture Department promoted FPOs had conducted meetings at their FPOs not so regularly. Hence there is no significant difference between NGO promoted FPOs and state horticulture department promoted FPOs with regard to conduct of meetings.

With respect to training programmes organized, it is clearly seen from the table 3 that majority (78.67%) of the respondents of the NGO promoted FPOs had organized more than 5 training programmes and almost half (48.00%) of State Horticulture Department promoted FPOs had 3 training programmes. Hence, there is no significant difference between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard to training programmes organized at the FPOs had 3 training programmes. With regard to attendance of the members for meeting, 52.00 per cent of the NGO promoted FPOs have fifty to seventy-five per cent of the members attending the meeting while 72.00 per cent of State Horticulture Department FPOs have less than fifty per cent of the members attending the meeting. Hence there is no significant difference between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard to attendance of the members.

With respect to backward linkage, it was observed that more than half (52.00%) of the NGO promoted FPOs were providing best quality input on/before onset of sowing operations followed by 36.00 per cent of State Horticulture Department promoted FPOs were providing good quality input on/before onset of sowing operations. Hence, there exists a significant difference at five per cent level between NGO promoted FPOs and State

Horticulture Department promoted FPOs with regard to backward linkage. With regard to market linkage, it was observed that 49.33 per cent of NGO promoted FPOs had favourable market linkage which exists for only few crops, followed by 48.00 per cent of State Horticulture Department promoted FPOs were having poor market linkage. Hence, there exists a significant difference at five per cent level between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard to market linkage.

Regarding dissemination of market information, it is observed from the table 3 that 64.00 per cent of NGO promoted FPOs were disseminating market information which are accurate and timely and 66.00 per cent of state horticulture state horticulture department promoted FPOs were disseminating market information which are timely but not accurate.

Hence there exists a significant difference at five per cent level between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard to dissemination of market information. With respect to aggregation and storage of produce/input, it is clearly noted that 61.33 per cent of NGO promoted FPOs had an average godown facility to store the input/produce and 54.00 per cent of State Horticulture Department promoted FPOs had poor go down facility. Hence, there is no significant difference between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard to aggregation and storage of produce/input.

With regard to primary processing, it was clearly observed from the table 3 that majority (70.67%) of the NGO promoted FPOs had average kind of primary processing units available for members followed by in 98.00 per cent of state horticulture department promoted FPOs had no primary processing units available for members. Hence, there exists a significant difference at five per cent. level between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard

to primary processing facilities availed at the FPOs.

Regarding customer hiring services, it was observed that almost all (97.33%) NGO promoted FPOs had only few equipment available on time for the FPO members and in all the State Horticulture Department promoted FPOs had no custom hiring services available for members. Hence, there exists a significant difference at one. per cent level between NGO promoted FPOs and State Horticulture Department promoted FPOs with regard to custom hiring services provided by the FPOs.

It was observed that in majority of aspects covered under performance of FPOs, NGO promoted FPOs were good at many aspects compared to State Horticulture Department promoted FPOs. This might be because the NGO is fulfilling the prime objectives of its establishment and it is analysed from the study that NGO promoted FPOs were having less issues and better turnover compared to State Horticulture Department promoted FPOs and NGO promoted FPOs are moving towards fully commercial forms of business and welfare functions.

Turnover of NGO promoted FPOs and State Horticulture Department promoted FPOs

It is observed, from the table 4 that, among the three FPOs promoted by NGO (Vrutti Livelihood Resource Centre) two FPOs were having medium level of turnover followed by one FPO was having low level of turnover. With regard to State Horticulture Department promoted FPOs, both the FPOs studied under the research were having low level of turnover. The chi-square analysis indicates that there exists a significant difference at five per cent level between the turnover of NGO promoted FPOs and State Horticulture Department promoted FPOs, this might be because the NGO promoted FPOs were having higher revenue generation, better services availed for its members and higher number of members registered than State Horticulture Department promoted FPOs.

Table 1: Indicator-wise performance of Farmer Producer Organizations (n = 125)

Sl. No.	Items	Criteria	F	%
1.	Rules and regulations for the FPO	Exists, understood: and followed by all penalties for breaking rules	00	00.00
		Exists and understood, by most but not fully followed penalties in some but not all cases	125	100.00
		Exists, many members are not aware, no Penalties	00	00.00
		Only promoters and staff say that they exist, members do not know them	00	00.00
2.	Credit service	Demand based	18	14.40
		Provided based on member's decision	55	44.00
		Purpose based	00	00.00
		No such services	52	41.60
3.	Percentage of loan offered to members	> 50% of the members	00	00.00
		25-50% of the members	00	00.00
		< 25% of the members	73	58.40
		Nil	52	41.60
4.	Internet services	Equipped with internet connection as well as computer along with operating staff	81	14.40
		Equipped with computer along with one operating staff with no internet connection	26	20.80
		Possess computer but lack with the operating staff	18	14.40
		Doesn't possess internet service	00	00.00
5.	Rotation of executive body	Fixed time period	20	16.00
		Variable time period	56	44.80
		Only when required	49	39.20
		No rotation of body	00	00.00
6.	Conduct of meeting	Regular interval	26	20.80
		Not so regularly	68	54.40
		More irregularly	22	20.80
		Not fixed time and day	09	07.20
7.	Auditing of accounts of FPO	Every year	106	84.80
		Quarterly	00	00.00
		Sometimes when required	19	15.20
		No auditing taken place	00	00.00
8.	Training programmes	More than 5 training programmes are organized	74	59.20

	organized	3-5 trainings programmes are organized	27	21.60
		3 training programmes are organized	24	19.20
		No training programmes organized	00	00.00
9.	Planning, implementation, Monitoring and Evaluation programmes	Regular with 100% members involvement	00	00.00
		Regular but only 50% of the member	29	23.20
		Irregular and 50% of the members	82	65.60
		Nil	14	11.20
10.	Attendance of the members for meeting	> 90%	00	00.00
		75-90%	23	18.40
		50-75%	48	38.40
		< 50%	54	43.20
11.	Insurance service	Insurance service is provided for all the farmers as well as crops of the area	00	00.00
		Insurance service is provided only for few selected crops in the area	00	00.00
		Insurance service is provided only for farmers but not for crops	00	00.00
		No insurance service at all	125	100.00
12.	Backward linkage (Input supply)	Best quality input on/before onset of sowing operations	56	44.80
		Good quality input on /before onset of sowing operations	52	41.60
		Average quality input but not on timely basis	17	13.60
		No input supply activities have been carried out	00	00.00
13.	Training programmes attended	More than 75% training programmes attended	68	54.40
		50-75% trainings programmes are attended	27	21.60
		50% training programmes are attended	22	17.60
		No training programmes attended	08	06.40
14.	Market linkage	Favourable and exists for all crops	24	19.20
		Favourable and exists for only few crops	58	46.40
		Poor market linkage	43	34.40
		Nil	00	00.00
15.	Dissemination of market information	Accurate and timely	59	47.20
		Accurate but not timely	23	18.40
		Timely but not accurate	43	34.40
		No technical information	00	00.00
16.	Aggregation and storage of produce/input	Organizations are equipped with better go down and storage units	00	00.00
		An average godown facility to store the produce/input	46	36.80
		Poor godown facility	56	44.80
		No godown or storage facility	23	18.40
17.	Primary processing (drying, cleaning and grading)	Well advanced processing units are available	00	00.00
		An average kind of primary processing units are available	53	42.40
		Poor or bad processing units	23	18.40
		No such facilities are existed	49	39.20
18.	Custom hiring service	All the farm equipments are available on time	00	00.00
		All the farm equipments are available for the members but not on time	00	00.00
		Only few equipments are available on time for the farmers	73	58.40
		No custom hiring services are available	52	41.60
19.	Participation of members in decision making	Issues fully undersigned by all members decisions collectively taken by all members	00	00.00
		Issues understood by representatives and some members, who also influence decisions	57	45.60
		Understanding issues, decision taking limited to representatives and one or two members	46	36.80
		High dependence on promoters and or on take all decisions	22	17.60
20.	Participation of members in responsibility sharing	All members regularly share the responsibility on rotation	00	00.00
		Responsibility shared among some few members	57	45.60
		Some people take responsibility or depend on staff or promoter	47	37.60
		High dependence on promoter and or staff	21	16.80
21.	Book keeping and Documentation	All books are up to date. and correctly maintained and regularly audit has done	125	100.00
		All books are up to date. and correctly maintained but no auditing has taken place	00	00.00
		Books are well maintained but not regularly updated	00	00.00
		No document or books are properly maintained	00	00.00
22.	Sanctioning of loans	Sanctioned to all the members	00	00.00
		Sanctioned to > 50% of the members	00	00.00
		Sanctioned to < 50% of the members	73	58.40
		No loans are sanctioned	52	41.60
23.	Loan repayment	More than 90% repayment has done in stipulated time	00	00.00
		70% to less than 90% repayment has done	73	58.40
		50% to less than 70% repayment has done	00	00.00
		No loan services	52	41.60
24.	Attitude of members towards FPO and its activities	More than 90% of the members expressing favourable attitude	38	30.40
		More than 75% up to 90% of the members expressing favourable attitude	54	43.20
		50-75% members expressing favourable attitude	33	26.40
		Less than 50% of members expressing favourable attitude	00	00.00
25.	Team spirit among the group members	Team spirit is excellent	11	08.80
		Team spirit is good	54	43.20
		Team spirit is average	48	38.40
		Team spirit is poor	12	09.60

Table 2: Overall performance of the FPOs n = 125

Sl. No.	Category	Frequency	Percentage
1.	Poor (< 36.29)	32	25.60
2.	Average (36.29 – 42.03)	59	47.20
3.	Better (> 42.03)	34	27.20
Mean = 39.16		SD = 5.74	

Table 3: Difference between NGO promoted FPOs and State Horticulture Department promoted FPOs n = 125

Sl. No.	Items	Criteria	NGO promoted FPOs (n1=75)		Horticulture Dept. promoted FPOs (n2=50)		Chi-square value
			F	%	F	%	
1.	Credit service	Demand based	18	23.99	00	00.00	7.93*
		Provided based on member's decision	55	73.34	00	00.00	
		Purpose based	00	00.00	00	00.00	
		No such services	02	02.67	50	100	
2.	Percentage of loan offered to members	> 50% of the members	00	00.00	00	00.00	8.21*
		25-50% of the members	00	00.00	00	00.00	
		< 25% of the members	73	97.33	00	00.00	
		Nil	02	02.67	50	100	
3.	Conduct of meeting	Regular interval	21	28.00	05	10.00	6.42 ^{NS}
		Not so regularly	42	56.00	26	52.00	
		More irregularly	12	16.00	10	20.00	
		Not fixed time and day	00	00.00	09	18.00	
4.	Training programmes organized	More than 5 training programmes are organized	59	78.67	15	30.00	5.85 ^{NS}
		3-5 trainings programmes are organized	16	21.33	11	22.00	
		3 training programmes are organized	00	00.00	24	48.00	
		No training programmes organized	00	00.00	00	00.00	
5.	Attendance of the members for meeting	> 90%	00	00.00	00	00.00	7.25 ^{NS}
		75-90%	18	24.00	05	10.00	
		50-75%	39	52.00	09	18.00	
		< 50%	18	24.00	36	72.00	
6.	Backward linkage (Input supply)	Best quality input on/before onset of sowing operations	39	52.00	17	34.00	8.56*
		Good quality input on /before onset of sowing operations	34	45.33	18	36.00	
		Average quality input but not on timely basis	02	02.67	15	30.00	
		No input supply activities have been carried out	00	00.00	00	00.00	
7.	Market linkage	Favourable and exists for all crops	19	25.33	05	10.00	8.94*
		Favourable and exists for only few crops	37	49.33	21	42.00	
		Poor market linkage	19	25.34	24	48.00	
		Nil	00	00.00	00	00.00	
8.	Dissemination of market information	Accurate and timely	48	64.00	11	22.00	7.92*
		Accurate but not timely	17	22.67	06	12.00	
		Timely but not accurate	10	13.33	33	66.00	
		No technical information	00	00.00	00	00.00	
9.	Aggregation and storage of produce/input	Organizations are equipped with better godown and storage units	00	00.00	00	00.00	6.72
		An average godown facility to store the produce/input	46	61.33	00	00.00	
		Poor godown facility	29	38.67	27	54.00	
		No godown or storage facility	00	00.00	23	46.00	
10.	Primary processing (drying, cleaning and grading)	Well advanced processing units are available	00	00.00	00	00.00	9.89*
		An average kind of primary processing units are available	53	70.67	00	00.00	
		Poor or bad processing units	22	29.33	01	02.00	
		No such facilities are existed	00	00.00	49	98.00	
11.	Custom hiring service	All the farm equipments are available on time	00	00.00	00	00.00	11.55**
		All the farm equipments are available for the members but not on time	00	00.00	00	00.00	
		Only few equipments are available on time for the farmers	73	97.33	00	00.00	
		No custom hiring services are available	02	02.67	50	100	

Table 4: Turnover of NGO promoted FPOs and State Horticulture Department promoted FPOs (n = 05)

Category of turnover (Rs. in Lakhs)	NGO promoted FPOs (n1=3)		State Horticulture Dept. FPOs (n2=2)		Mean	SD	Chi-square value
	F	%	F	%			
Low (< 33.16)	1	33.33	2	100.00	36.60	06.8	6.24*
Medium (33.16 – 40.03)	2	66.67	0	00.00			
High (> 40.03)	0	00.00	0	00.00			

Conclusion

The results showcased predominantly average performance of FPOs with good input supply, training, auditing and market information dissemination, but there are gaps in credit services, insurance facilities, infrastructure and member participation in decision-making that needs to be improved in FPOs. Apparently study showed that FPOs promoted by NGO performed better than the FPOs promoted by horticulture department, particularly in financial services, market linkages and capacity building activities. Strengthening institutional support, improving member involvement in decision making and enhanced financial and marketing services are essential for the better performance of the FPOs which holds significant potential to improve farmers' livelihoods if operational challenges are addressed effectively.

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