UNDERSTANDING OF FPOs' BUSINESS ECOSYSTEM AND STRATEGIES TO TAP POTENTIAL

ASHUTOSH KUMAR AND VINOD KUMAR

NABARD, Department of Economic Analysis and Research, Mumbai

Bringing together farmers to form Farmer Producer Organisations (FPOs) is considered to be a promising approach to address the challenges facing the small holders by providing them the benefits of economies of scale. Presently, there are around 10,000 FPOs existing in the country, out of which NABARD has promoted 5060 (about 50 %) while remaining FPOs are promoted by Small Farmers' Agri-Business Consortium (SFAC), National Cooperative Development Corporation (NCDC) and by other agencies. Since the formation of FPOs is a recent phenomenon, the literature on evaluating the impact of membership of FPOs on different aspects of a farmer's welfare remains limited. Some of the available studies have been incorporated in this paper to analyse the impact of FPO-membership on farmers' wellbeing in terms of saving in cost of production and increase in income through better price realization. Findings of the studies present a mixed picture with reference to impact of FPO members on farmers. For instance, the study on Vegetable Initiative for Urban Clusters in States of Chhattisgarh, Delhi and Jammu & Kashmir (2013) conducted by SFAC has revealed favourable findings, such as increased productivity (13 per cent) of vegetables (per unit area) in Chhattisgarh, increased area (2 per cent) and production (8 per cent) in Jammu, enhanced use of scientific package of practices in four states of Delhi, Chhattisgarh, Jammu and Kashmir. Similarly, the study on Formation of FPOs and Its Impact on the Development of Sustainable Crop Production in Karnataka revealed increase in productivity (10 per cent) as well as income (20 per cent) of farmers having FPO membership. On the other hand, the study on Farmer Producer Organizations & Agri-Marketing: Experiences in Selected States, Relevance and their Performance in Punjab finds that only a small fraction of produce of farmers having FPO membership is actually sold through FPO channel. An internal study conducted by NABARD in 3 states viz. Madhya Pradesh, Odisha and Kerala revealed an increase of 29 per cent in net annual income of the FPO members. The studies have recommended for initiating steps for refining the approach towards FPOs. Suggested strategy includes strengthening the existing FPOs through intensive capacity building, membership mobilization, scaling up FPO-Bank Linkage initiatives through SLBC/Banks, digitization of all the FPOs database, sharing the database with other stakeholders for facilitating online business transactions, facilitating business incubation and other ecosystem services to FPOs through partnerships and networking, convergence with the State Govt. schemes, networking with market players, agro industries, and integrating with electronic National Agriculture Market (e-NAM). It is only through continuous and concerted efforts of all stakeholders that a sustainable and effective FPO structure can be established for enhancing the income of small and marginal farmers.

INTRODUCTION:

Indian Agriculture sector has progressively become predominantly smallholder driven as 86 per cent farmers possess less than two ha. of land having a share of only 46 per cent of area. The Agricultural Census (2015-16) indicates that the average size of a landholding had declined to 1.08 ha from 1.41 ha (Agricultural Census, 1995-96), which is hardly enough to eke out a livelihood opportunities for a family. Smallholders often suffer from poor access to quality inputs, institutional credit and other resources, organised markets, modern farming technologies, etc. Economies of scale are not available to most smallholders, which becomes a weakness as overheads on inputs and services purchased are very high. Their bargaining power in the marketplace for outputs too remains limited by their low individual marketable surplus.

In this context, aggregation of produce by organising small farmers into Farmer

Producer Organizations (FPOs) achieve economies of scale can spur farm-level efficiency. Aggregation is also an effective method to mitigate risk in agriculture and support livelihoods of farmers, particularly the small and marginal ones. It helps link producers with off-takers effectively to achieve economies of scale along the value chain. Over the years, efforts to organise farmers evolved into various forms of aggregation with varying degrees of success. Farmer Producer Organisations (FPOs) in their current form are one such manifestation.

METHODOLOGY:

This paper is based on the studies conducted by various implementing agencies, research institutes and academicians. The broad objective of the paper is to analyse the socio-economic impact of FPO-membership on farmers' well-being in terms of saving in cost of production and increase in income through better price realization.

RESULTS AND DISCUSSION:

I. Role of Different Stakeholders in Promotion of FPOs

Recognizing the importance of FPOs as a means of linking farmers to agri value chain and increasing the farmers' income, the Hon'ble Union Finance Minister, in his budget speech for 2014-15, announced setting up of "Producers Organization Development Upliftment Corpus (PRODUCE) Fund" of Rs.200 crore in NABARD to be utilized for the promotion of 2000 Farmer Producer Organizations (FPOs). Accordingly, PRODUCE Fund Scheme for promotion of Farmer Producer Organizations (FPOs) was operationalized for implementation over next 3 years' period.

Central Sector Scheme on Formation & Promotion of 10,000 FPOs

The success of the FPOs promoted under PRODUCE Fund encouraged the Govt. of India to announce a Central Sector Scheme on Formation and Promotion of 10,000 FPO in the Union Budget of 2019-20. The salient features of the Scheme are as under:

- i. The scheme aims to provide holistic and broad-based supportive ecosystem to form new 10000 FPOs to facilitate development of vibrant and sustainable income-oriented farming and for overall socioeconomic development.
- ii. Efforts will be made to form on an average of two FPOs in at least

- each of potential 5000 blocks out of existing about 7000 blocks. However, efforts will be made to cover all blocks of the country.
- iii. Formation and promotion of FPO shall be based on Produce Cluster Area which is broadly defined as a geographical area wherein agriculture and allied produce such as horticulture produce or similar or of almost similar nature is grown or cultivated.
- iv. FPOs with a minimum farmermembers' size of 300 shall be eligible under the scheme in plains, while in North-Eastern and Hilly areas (including such other areas of UTs), size of 100 shall be eligible.
- v. In order to form and promote FPOs, Ministry of Agriculture and Farmers Welfare (MoA&FW), Govt. of India identified Implementing Agencies (viz. NABARD, SFAC, NCDC) who will select Cluster- Based Business Organizations (CBBOs) for hand holding of FPOs at ground level.
- vi. Formation and Incubation cost of CBBO, limited to maximum of Rs. 25 lakh per FPO of support or actual which is lesser, is to be provided for five years from the year of formation.
- vii. Financial support to FPO@ up to maximum of Rs. 18 lakh per FPO

- or actual, whichever is less is to be provided during three years from the year of formation.
- viii. Provision of Equity Grant in the form of matching grant upto Rs. 2,000 per farmer member of FPO subject to maximum limit of Rs. 15.00 lakh per FPO.
- ix. Creation, Maintenance & Management of Credit Guarantee Facility with a dedicated Credit Guarantee Fund (CGF) by NABARD and NCDC.
- x. BIRD, Lucknow & Laxmanrao Imandar National Academy for Co-operative Research & Development (LINAC), Gurugram are designated as Nodal Training Institution at central level.
- xi. Three tier structure is set up at National level, State level and District level for effective implementation and monitoring of formation and promotion of FPOs.

Presently, there are around 10,000 FPOs existing in the country, which are promoted by Govt. of India, National Bank for Agriculture and Rural Development (NABARD), Small Farmers' Agri-Business Consortium (SFAC), National Cooperative Development Corporation (NCDC), State Government Departments and Civil Society Organizations over the last 8 to 10 years. Out of these FPOs, NABARD alone has promoted about 50% i.e. 5060 FPOs (Table 1) as on 31 March 2021 (NABARD Annual Report, 2020-21) and remaining are promoted by other agencies.

II. Studies on FPOs

After having ventured into formation nurturing of **FPOs** towards and betterment of small holders in Indian agriculture, it is an opportune time to evaluate the performance of these FPOs in terms of its contribution to increase the farmers' income by saving in input cost, realising better prices for their output, diversification of their farming towards high value crops, and integration of produce with market though efficient value chains, etc. This has been attempted through scanning of some of the important studies either conducted or supported by various implementing agencies, research institutes, independent academicians and researchers, etc.

II.1 Global Experience

II.1.1. Kachule et al. (2005) studied the performance of National Smallholder Farmers' Association of Malawi (NASFAM) in Eastern Africa. Its 100,000 members are smallholder farmers with less than one hectare of land. NASFAM came into being in the year 1997 after a USAID-funded Smallholder Agribusiness Development (SADP) was implemented by Agricultural Cooperative Development International (ACDI/VOCA). NASFAM provides credit,

Table 1: Cumulative status of FPOs under PODF, PODF-ID and PRODUCE fund as on 31 March 2021

Particulars	PODF-ID	PODF	PRODUCE	Overall
Target FPOs	3,000	-	2,000	5,000
FPOs sanctioned	2,906	-	2,154	5,060
FPOS Salictioned	(576)	ı	-	(576)
FDOs registered sumulatively	1,627	-	2,094	3,721
FPOs registered cumulatively	(633)	-	-	(633)
Crant canctioned (Ds. crare)	248.0	47.1	205.4	500.6
Grant sanctioned (Rs. crore)	(46.8)	-	-	(46.8)
Grant utilised (Rs. crore)	68.2	21.8	176.4	266.5
	(38.6)	(4.1)	(11.3)	(53.9)
Farmers covered as shareholder (lakh)	4.7	-	9.1	13.8
Share capital collected by FPOs (Rs. crore)	45.3	1	98.2	143.5
Producer organisation promoting institutions associated	663	-	779	1,442
Resource support agencies	15	-	17	32

Source: NABARD, Annual Report, 2020-21.

Notes: FPO = Farmer Producers' Organisation; PODF = Producers' Organisation Development Fund (PODF); PODF-ID = PODF Interest Differential; PRODUCE = Producers Organisation Development and Upliftment Corpus. Data in brackets are for FY2021.

extension and training, uses economies of scale to reduce transport costs and actively seeks external markets for export of produce. It works as a multifunctional, multi-sectoral organization. Its operations are divided between the commercial and development sectors, registered as a profit company and as an NGO. NASFAM is a complex evolution of the cooperative model

and at grassroots level, the association has cooperative characteristics. Also, commercial and other entities have been created to handle functions that are typically circumscribed by the traditional cooperative structure, the commercial and business services functions.

II.1.2. Oromia Coffee Farmers Cooperation Union (OCFCU) in Ethiopia was founded in the year 1999 comprising

34 coffee cooperatives representing 22,503 smallholders. Besides substantial investment in physical infrastructure like storage and processing of coffee, the Cooperative has utilized the premium gained from fair trade and organic contracts to address social objectives such as setting up potable water projects and the building of schools and clinics (Poole and Frece 2010).

II.1.3. Citing an example of Rural Community-based Enterprises (RCE) based in Ghana (Donovan et al. 2008) argue that RCE act in a similar way to other forms of collective action to increase economic and social empowerment through scale by providing lower costs, increased bargaining power in the market, democratic decision making rights and access to political and legal arenas, and increased access to services. External players like donors or NGOs played significant role in promoting these enterprises. However, externally driven organizations have usually met with failure. At the same time, internally driven enterprises have suffered from lack of funds and inadequate capacity. A role exists for external actors in the development of RCEs, but the attention should be given to issues of dependence, governance and ownership for these partnerships to succeed in the long term.

II.1.4 From the year 2004-05, the International Center for Tropical Agriculture (CIAT), the Food and

Agricultural Organization of the United Nations (FAO) and, the Agropyme Project of Swisscontact and Catholic Relief Services (CRS) looked at strategies to facilitate the participation of smallholder producers in vegetable supply chains linked to local supermarkets. For this, three formal Producer Organizations (POs) in El Salvador and two in Honduras were investigated. COHORSIL is a farmer co-operative in Honduras that was founded in the year 1980 and traditionally focused on coffee production, processing and marketing. Faced with declining prices for coffee, the co-operative sought to diversify its activities. With Swiss funding, they branched into the production and marketing of fresh vegetables. On fee basis, COHORSIL ensured that its members had access to seedlings produced in greenhouses, warehouse and packaging facilities, and marketing services. Hellin et al. (2007) found that despite significant investments of time and financial resources, existing producer organizations in both countries make up fewer than 5 per cent of total horticultural producers in each country.

II.1.5 From cases of producers organizations as discussed in the above sections, it was observed that the possible reasons for little progress of these organizations include limited business skills within existing producer organizations; organizational models which are too costly in terms of time

and financial resources for linking smallholders to dynamic markets; and uncertainty about the benefits that smallholders can expect from the supermarket channel. In contrast, farmers in Mexico reported that there are no advantages to establish a farmer organization to sell maize grain. This is partly because the government fixes the grain price that farmers receive. In general, maize farmers have formed organizations for two reasons: to take advantage of subsidized extension advice together with an associated agriculture technical package; and to access and procure subsidized maize seed.

II.2. INDIAN EXPERIENCES

This section dwells on the findings of some of the studies on FPOs conducted in India with special reference to institutional aspects and its impact on production, productivity and income enhancement.

II.2.1 Impact Study of the Vegetable Initiative for Urban Clusters in States of Chhattisgarh, Delhi and Jammu & Kashmir (2013) – by SFAC New Delhi

The Vegetable Initiative for Urban Clusters (VIUC) scheme was launched in the year 2011-12 under Rashtriya Kirshi Vikas Yojana (RKVY) to enhance the production and productivity of vegetables and augment farmers' income along with assuring sustainable supply of vegetables in the identified consumption centers at affordable

prices. Small Farmers' Agribusiness Consortium was designated as the nodal agency for providing necessary technical and managerial support to the State Governments in the implementation of the scheme and was assigned the tasks of facilitating the State Governments in conducting Baseline Survey to develop a holistic understanding of vegetable value chains for the identified consumption centers and also mobilize small and marginal farmers to formally take up entrepreneurial activity through collective bargaining. The Baseline Survey was meant to be the basis for a "before and after" assessment in respect of few critical parameters. The implementation of this initiative was distinctly designed in such a way that membership based FPOs have been made primary beneficiaries and epicentre of the whole initiative and the other components of the scheme have been linked to these FPOs. This initiative envisaged mobilizing over 1.00 lakh farmers all over the country targeting formation of 98 FPOs (each with an average membership of 1000 farmers). SFAC is also working in close co-ordination with State level nodal agencies appointed by respective State Governments in the implementation of the scheme at State level.

The initiative has made considerable progress in all the aspects including mobilization of farmers, formation of FarmersInterestGroups(FIGs), initiation

of collective agri-input purchase and vegetable marketing. With the objective of appraising the progress of the initiative during its first year of operation, SFAC had commissioned the present Impact Assessment Study of VIUC through a Technical Support Agency (TSA) in the States of Chhattisgarh, Delhi and Jammu & Kashmir. The state-wise major observations are as under:

IMPACT OF THE SCHEME Chattisgarh

- It was observed that both the area and production of vegetables decreased by 38 and 30 percent, respectively, when compared to previous year. However, during the same period, productivity per unit of area had increased by 13 %.
- A total of 6070 farmers were mobilized to form five Farmers' Producers' Organizations. However, only 1-5 percent of the vegetable growing farmers had mutually started collective procurement of farming inputs and selling their produce.
- Resource Institutions (RIs) had worked in establishment of linkage of farmers with banks for availing credit and financial services. Approximately 35 per cent farmers were linked with KCC for their credit requirement.
- No significant impact was observed in establishing linkage for collective procurement of farm inputs and joint marketing of their produce.

Delhi

- Resource Institutions had mobilised 1862 farmers for an FPO registered in South West Districts.
- The impact on the collective approach was clearly visible here as almost 90 percent farmers were working towards joint procurement and production but they were carrying out the marketing of the produce individually.
- Bank account of all the FIGs were opened but no formal linkage was established for input procurement and marketing.

Jammu

- It was clearly visible that the total area under vegetables had increased by 2 percent from baseline year (2011-12) and the production had also increased by 8 percent during the period for assessment.
- Farmers had learnt applying scientific and modern package of practices for Vegetable Cultivation. As a result, there was an increase in productivity of the vegetables per unit area by 6 percent.
- Collective and mutually beneficial initiatives were already in place in the form of joint transportation, input purchase and marketing.
- Through the scheme, approximately 1500 farmers and most of their family members and casual helpers

were provided direct and indirect employment through Vegetable Cultivation.

Kashmir

- As per interaction with farmers and the officials, it was reported that the area and production under vegetables had increased. However, no quantification of the same was available.
- Farmers were applying modern package of practices and cultivation under protected condition was on the rise.
- Strengthening the system of value chain for backward and forward linkages was in nascent stage.
- As Srinagar is a tourist place, marketing linkages with hotels and retail food chains has a lot of potential should be developed for a regular supply of fresh or maybe organic vegetables.

II.2.2 Case Study - Nava Jyoti Producer Company Ltd: Serving Tribal Farmers (Orissa)

NABARD explored the questions related to formation, nurturing and sustainability of FPOs through an action research project in Orissa which it funded during 2009-2011. The project involving the formation of FPCs was implemented in 55 villages in two Gram Panchayats with a membership of 1,350 tribals under NABARD's financial support (Nayak and

Nayak, 2012). The project focused on establishing a sustainable community enterprise system and it prepared a manual for guiding future endeavours. The company was created to procure pulses (arhar, horse gram and green gram), turmeric, hill broom, etc., from the farmers. The project also aimed to collect cashew, tamarind, mahua and other items and market them after value addition. The producers were trained in natural farming practices, land and water management practices, improving the community health, education and basic infrastructure in the area. They were then able to negotiate better with the local traders and intermediaries. Their net income from different pulses and hill broom went up by 60 to 90 per cent as a result of the initiative. The FPO helped the members grow economically. Important lessons learnt from the experiment are as follows:

- Simultaneous optimisation of all the design variables (size, scope, technology, capital, ownership and management) of an enterprise system is fundamental to sustainable community enterprise system;
- ii. Sustainability of a system rests on building a system around the weaker groups;
- iii. The foundation for success of such a community model is the level of trust and cooperation among the people within the community;

- iv. The implementation strategy has to be gradual and largely community driven; and
- v. Nava Jyoti Producer Company, which formed a part of this project, has been operating in Rayagada district of Odisha since 2009. The experiment, where various asymmetries addressed, proved that there could be significant performance improvements on all the sustainable indicators by following sustainable design principles, viz., small organisation size, greater diversity of activities, sustainable agriculture and appropriate technologies, and selling produce in local markets (Nayak, 2017).

II.2.3 Nayak (2014a) in one of the studies entitled 'All-India Baseline Study on Natural Farming Practices' conducted by XIMB, Bhubaneswar concluded that early Producer Companies from the states of Kerala, Tamil Nadu, Rajasthan, Maharashtra, Madhya Pradesh, Jharkhand, and Bihar had poor financial performances, and benefits to farmers/ producers from these producer organisations had been marginal. Performance of producer organisations depends on different sustainable indicators, such as: (i) social capital formation; (ii) financial capital formation; (iii) capability enhancement of producers; (iv) external networks with markets and financial institutions; and, (v) engagement of producer organisation with diverse needs of the community. In an another study, Nayak (2014b) entitled 'All-India Baseline Study on Producer Companies concluded that those FPOs that had stayed small but had operated on a broader scale provided more value to farmer members and producer organisations, including Deccan Development Society, Mahila Umang, etc., that adopted local marketing techniques with multiple products had gained.

II.2.4 Farmer Producer Organizations & Agri-Marketing: Experiences in Selected States, Relevance and Their Performance in Punjab (2017)

Α study Farmer Producer Organizations & *Agri-Marketing:* Experiences in Selected States, Relevance and Their Performance in Punjab (2017) undertaken by the Centre for Research in Rural and Industrial Development (CRRID), Chnadigarh with NABARD support compared the successful & unsuccessful producer organizations in the state of Punjab and Madhya Pradesh by categorizing the FPOs under 3 categories viz. 'nascent', 'emerging' and 'mature' FPO. A total of 19 FPOs (16 in Punjab and 03 in Madhya Pradesh) and 285 farmer members (240 in Punjab and 45 in Madhya Pradesh) were studied.

Major findings of the study are as under:

 The proportion of farmers who preferred to sell produce through FPO channel is small.

- The proportion of marginal and small farmers in total beneficiaries was higher than medium large beneficiaries since the latter preferred the direct channel for sale. For example, in PRODUCE Fund emerging category FPOs, in Global SHGs (an FPO), all farmers who sold their produce through the FPO are marginal and small. In mature category of FPOs, in Dhira Patra FPO (Punjab), this proportion was 83.33 per cent, and almost hundred per cent in Narsingh and Dada Darbar FPOs in Madhya Pradesh.
- Diversification of Crops: Although, the number of farmers belonging to nascent and emerging categories of FPOs producing traditional crops (wheat and paddy) in post FPO period remained more or less same (slightly higher in case of paddy), yet the number of farmers growing other crops such as vegetables, peas, potato, etc and selling through the FPOs have increased. For instance, in nascent category, 20 farmers sold 'other vegetables' during pre-FPO period whose number rose to 28 (40 per cent increase) in the post-FPO period (10 sold through the FPO). Similar trend was observed in other FPOs also, albeit, at a smaller scale.
- Decline in cost of production: Cost of production in respect of six out of 10 crops (i.e. those sold through FPO) had declined. This is true for 'other

- vegetables' also in all the categories (except in rabi season in PRODUCE Fund emerging category FPOs).
- Mixed response of net earnings gained per quintal: On examining the net earnings gained per quintal from the produce sold through FPO vis-à-vis that directly in the market, the study observed that net earnings of the farmers in FPOs belonging to the nascent category through sale of 'peas' was lower at Rs. 467.46 per quintal, whereas direct sale fetched them net earnings of Rs. 607.44 per quintal. On the other hand, net earnings per quintal by sale of 'other vegetables' through the nascent FPOs was higher by 5.31 per cent in rabi but lower by 5.70 per cent in kharif season than that earned by direct sale in the market.
- Access to quality seeds and other agri-inputs in the post FPO period had improved. Further, they have benefitted from dissemination and transfer of new production technology through FPO.

II.2.5. Formation of FPOs and Its Impact on the Development of Sustainable Crop Production in Karnataka (2017)

Major findings of a study on "Formation of Farmer Producer Organisations and Its Impact on the Development of Sustainable Crop Production in Karnataka" by Institute of Agri Business Management, Swami Keshwanand

Rajasthan Agricultural University (Source: International Journal of Agriculture Sciences Volume 9, Issue 4, 2017) are as under:

- Per hectare production improved by 10 per cent by the end of the project period.
- There was a minimum 20 per cent rise in net income of the FPO farmers
- 81% of the farmers were rarely using APMC for the selling of the agricultural produce while 93% of the farmers were taking help from the local traders to sell their agricultural produce.
- The major source of loan for the farmers was local moneylenders and bank and sometimes micro finance. About 38.6 per cent of the farmers availed loan from local moneylenders followed by 34.4 per cent by Banks.
- About 67 per cent of the farmers had their bank/ Post office account.

II.2.6. Internal Study Conducted by NABARD: Encouraging Results from Field

Economic Impact: An internal study conducted by NABARD in 3 states viz. Madhya Pradesh (MP), Odisha and Kerala (in 2019-20) revealed an increase of 29 per cent in net annual income of the FPO members (Table 2). In Odisha, the average annual income of members prior to the joining of FPOs was estimated at Rs.79,557/-

which increased to Rs.90247/- after joining the FPO recording an increase of 13.4%. The average annual income of members prior to the joining of FPOs in Kerala was estimated at Rs.85,114/which increased to Rs.1,42,038/- after joining the FPO. As regards M.P., the average annual income of members prior to the joining of FPOs estimated at Rs. 1,54,640/- which increased to Rs. 1,79,548/- after joining the FPO. The increase in income of FPO members was estimated at 66.9 per cent and 16.1 per cent in Kerala and Madhya Pradesh respectively. The higher increase in income in Kerala could be attributed to plantation crops as against field crops in Odihsa and M.P.

Farmers reported receiving a higher average price for their produce after obtaining membership to FPOs. For instance, farmers in Madhya Pradesh reported an increase in average (per quintal) price by nearly 7.5 per cent in Kharif (2019) season and 12.5 per cent in the Rabi (2018) season, while in Kerala, average price was reported to have increased nearly per cent. In Odisha too, by 45 average price was reported to have increased. Correspondingly, the farmers' income was also reported to increase, for instance, by 13.4 per cent in Odisha. Farmers also reported achieving higher crop yield, saving on input cost and reduced cost of cultivation.

Table 2: Income Enhancement of FPO Members

(Avg. Annual Income in Rs.)

Name of State	Pre/Non-FPO	Post-FPO	Increase (%)
Odisha	79,557	90,247	13.4
Kerala	85,114	1,42,038	66.9
Madhya Pradesh	1,54,640	1,79,548	16.1
Total	3,19,311	4,11,833	29.0

Source: Field Study conducted by NABARD in 2019-20 in different states.

Declining Dependence on Informal Sources of Credit

The study in MP revealed that the dependence of FPO members on informal sources of credit such as moneylenders had reduced. While in the pre FPO phase, the average loan borrowed by the members from money lenders was Rs. 39,135/-, which got reduced to an average of Rs.5000/-. The non FPO members had an average borrowing of Rs. 30,097/- which was much more than the average borrowing of FPO members. In Kerala, sample farmers were heavily dependent on informal sources of credit in their pre-FPO phase; with farmers in 9 out of the 10 sample FPOs reporting loans from moneylenders. This changed drastically after obtaining membership to FPOs, with none of the farmers from the sample FPOs reporting any loan from moneylenders. Similarly, in Odisha, farmers in 6 FPOs reported taking loans from moneylenders in their pre-FPO phase which, post their FPO membership got reduced to farmers of only one FPO.

Social Impact: Farmers with **FPO** membership have also reported improvement in their social engagement after being associated with FPO. For instance, nearly 72 percent of the sample FPO-members in MP, 74.3 per cent in Kerala and 74 per cent in Odisha reported having started their participation in villagelevel meetings and other similar localgovernment initiatives. Similarly, nearly 74.2 per cent of sample FPO farmers in Kerala, 80 per cent in Odisha and 100 per cent in MP reported increased awareness about issues related to health, sanitation, hygiene, education, etc.

III. FACTORS IMPACTING THE SUCCESS OF FPOS

Based on the success stories of various FPOs from different states, following factors were identified in influencing the success of FPOs:

 Adoption of efficient cropping pattern and crop management

- Effective Marketing tie up with strong corporates
- Effective convergence with Govt.
 Schemes
- Success in creating need based infrastructure
- Timely and adequate availability of credit
- Achievement of forward and backward linkages in a progressive manner
- Business development through contract farming and direct marketing
- Constant efforts for need based capacity building and handholding
- Adoption of new technology
- Adoption of farmer level value addition through sorting grading.

IV. CHALLENGES FOR BUILDING SUSTAINABLE FPOS

Based on the feedback received during a workshop, IRMA (2017) has documented the challenges faced by FPOs. These include: member loyalty, limited access to finance, higher overhead costs, lower capacities for governance, lack of awareness of benefits among members, burden of statutory compliance, poor business planning, lack of convergence with government programmes, higher transaction costs in dealing with a large number of small holders spread over larger geographies, free-rider syndrome, low patronage by members, high attrition rate of professionals, and

low risk appetite. Most FPOs are initially not financially strong enough to deliver vibrant products and services to their members and secure their confidence. Professional management by trained and qualified CEOs and other personnel, under the supervision and control of a democratically-elected Board of Directors is required. However, such trained manpower is presently not adequately available in the rural areas.

Lack of funds is often reported by FPOs as one of the constraints. Access to affordable and timely credit is limited for want of collateral and credit history. Further, the credit guarantee cover being offered by SFAC for collateral-free lending is available only to Producer Companies that have a minimum of 500 members, and not to other forms of FPOs. Due to this, banks hesitate to extend credit facility to FPOs, which are registered under other legal statutes. The exclusion rate can be very high as 86 per cent of FPOs operate below the threshold level of membership and 29 per cent are not companies.

Currently, while farmers' production risks are partially covered under the existing insurance schemes, there is no provision to cover the business risks of FPOs. While input prices may be stable, output price can be volatile, squeezing the margins. The FPOs may therefore identify local consumers' needs and enter into tie-ups for sale of produce to expand their market opportunities.

Linkage with industry/other market players, large retailers, etc., leveraging their collective bargaining strength and aggregation is necessary for the longterm sustainability of FPOs.

V. CURRENT CHALLENGES IN FINANCING FPOS

As the FPOs strive to achieve sustainability, there is an urgent need to reorient the funding ecosystem to support the newly formed FPOs. The financing requirements of the FPOs are based on their stages in the lifecycle. Stages of the FPOs are broadly categorized into three phases:

- Incubation and Early Stage
- Emerging and Growing Stage
- Matured Stage (Business Expansion)

In each of the stage of the FPO, the financial needs were found to be different. In early stages, financial need of the FPOs revolves around the cost of mobilizing farmers, registration cost, cost of operations and management, training, exposure visits, etc. Mostly the need is met through the grant support. Later in the emerging and growing stage, FPOs need working capital to run their businesses. As the FPOs move towards expanding their businesses, POs need term loans to set up processing units, processing/grading/sorting storage godowns, cold storage, custom hiring centres, transport facilities, etc. The major challenge faced by the FPOs in accessing credit is lack of a long term

business plan and availability of audited financial statements and lack of solid track record.

VI. Enabling Marketing Linkages

Marketing is a crucial step in the path to empowerment of FPOs and farmers. This requires managerial skills to create linkages to wholesaler and cater to the needs of the urban and nearby markets. The poor understanding of the value chain starting from cultivation to market is a major challenge hampering the performance of these FPOs. The study undertaken by IRMA found that a Farmer Producer Company (FPC) named 'Bio Agricultural Produce and Processor Producer Company Limited' founded by 500 small and marginal farmers pursuing the small-scale business of tomato processing closed the functioning after facing a problem in marketing.

VII. MARKET INTEGRATION THROUGH COMMODITY EXCHANGE

Unlike in an APMC market, the farmer sets the price on the spot exchange and is not a price taker. Most importantly, it brings more competition to the otherwise restricted agri marketing space. Future market allows the farmer and other participant to hedge the risk by taking an offsetting position on futures exchanges. It is important to integrate small farmers into the world of commodity exchange. Handholding of the FPOs will enable to take benefit of these commodity exchanges and

provide much needed hedging of their price risk. NABKISAN, a subsidiary of NABARD is a SEBI recognised Certified Derivatives Trainer, and conducted several programmes for training of FPOs on futures trading (NCDEX platform), benefitting 150 FPOs in last fiscal year.

VIII. Linking FPOs to e-NAM

e-National Agriculture Market (NAM) is envisaged as a pan-India electronic trading portal which seeks to network the existing APMC and other market yards to create a unified national market for agricultural commodities. e-NAM has created a national network of physical mandis which can be accessed online. Interlinking and on-boarding of FPOs to e-NAM will be instrumental in providing the FPOs a wide marketing avenue. A new FPO module in e-NAM has been enabled which will help FPOs place their produce for bidding from their collection centres.

4. CONCLUSION AND FUTURE STRETEGY

As we celebrate our 75th Independence Day, the agricultural sector has grown from strength to strength, and contributed immensely to nation building. In order to ensure that the agricultural sector continues to be vibrant and the backbone of the economy, there is a need to address the challenges using novel approach. Our primary objective should be to make agriculture remunerative to our farmers especially small and marginal ones through collectivization in

the form of FPOs. Concerted efforts on the following lines are necessary from all stake holders to make this happen.

FOR POLICY MAKERS

- Coordination **Efforts:** of agriculture in India has been a State subject, the National Government and the State Governments need to coordinate, provide policy signal and guidelines that are internally and externally consistent to remove dysfunctions and large losses that might arise out of lack of coordination and difference in signalling among the key policy arms and departments of the Government(s). The NABARD can accordingly coordinate at the state level, converge their resources and expertise with respective district administration and local communities with initial support of community based NGOs to successfully implement and stabilize the FPOs in respective states.
- Diversified **Mandates: FPOs** should be designed according to localized, community-owned food system perspective (as opposed to commodity orientation), based on diversified cropping systems (to better withstand climate variability), free ecosystem services (e.g. soil formation, pollination, predation) and chiefly, food systems that are independent from corporations for the procurement of seeds and synthetic inputs.

- Optimal Cluster Size & Architecture of FPOs: For creating conditions for greater interactions both social and business transactions as well as resource convergence, greater participation in decision making, gradually building the sense of ownership and solidarity of the producer members; primary FPOs at Gram Panchayat (GP) level is recommended. In addition to GP level FPOs, Block level FPO Federation for value addition & District level FPO federation for Marketing/Exports can be organically developed to connect FPOs to consumers within the district but also in the state, national markets and global markets with equal ease.
- The directive for 'one district one product' in the National Scheme for 10,000 FPOs need to be correctly interpreted and worked out with an optimal institutional architecture in the district such that small producers' competence and resilience (to meet their own nutritious food needs through diversified farming systems even with climate changes) based on 'economies of scope' are not undermined in the long run.

For Implementing Agencies:

 Multi-functionality of FPOs: Multiple product and service business plan based on the needs and with agreement of producer members would be the best strategy to

- sustain the producer members and the FPO. While in the short term; an FPO may begin with a few activities and limited business portfolio; it needs to be designed and planned to gradually move towards multiproduct and service basket strategy in the long term in order to cater to most of the needs of the producer members in an FPO.
- Independent Governance FPOs: Irrespective of how FPOs are registered either under the Companies Act or Cooperative Society Act, they need to pursue the interests of their members through autonomous and effective governance structure, based on solidarity among producers. Successful farmers, facilitators and professionals staffing the FPO must be carefully chosen through a consultative process and adequately paid for their services. Local NGOs who understand the dynamics of the local community are to be tasked to build the capacity of the FPO to operate independently within a period of 3-5 years.
- Holistic Development &
 Empowerment of Smallholders:
 While product-market focus may
 work in the short term for some
 producers, FPO executives and
 market intermediaries; holistic
 development and empowerment of
 small and marginal producers and

- the rural agricultural communities should be the long term goal of public investments into FPOs.
- Strengthening the existing FPOs through intensive capacity building, membership mobilisation and scaling up FPO-Bank Linkage initiatives through SLBC/Banks.
- To facilitate organizing large scale orientation programmes for Branch Managers (through training establishments of respective banks) on FPO Financing.
- Digitization of all the FPOs for creating database, monitoring of fund utilization and sharing the data-base with other stakeholders for facilitating online business transactions.
- Convergence with the State Govt. schemes, corporate CSR funds and Agro Industries for nurturing and strengthening of FPOs.
- Networkingwithmarketplayers, large retailers, agro industries, electronic National Agriculture Market (e-NAM) through convergence approach and documenting success stories.
- Collaborating with State Governments and Banks through SLBC for appropriate state-specific policy for supporting FPOs and meeting the credit needs of FPO

REFERENCES:

- Donovan J and Poole ND. (2008), "Linking Smallholders to Markets for Non-traditional Agricultural Exports: A Review of Experiences in the Caribbean Basin. Inputs for Strategy Formulation by 'EU-ACP All Agricultural Commodities Programme", AAACP Paper Series. No. 2. Rome.
- Hellin J, Lundy M and Meijer M. (2007), "Farmer Organisation and Market Access", LEISA Magazine, Vol. 23, No. 1(2).
- Kachule R, Poole ND and Dorward A. (2005), "Farmer Organizations in Malawi: The Organisation Study. Final Report for Farmer Organizations for Market Access", DFID Crop Post Harvest Research Programme.
- National Bank for Agriculture and Rural Development (NABARD), Annual Report, Various Issues.
- National Bank for Agriculture and Rural Development (2020), Study on Farmer Producer Organisations.
- Nayak, A.K.J.R (2014a), " All-India Baseline Study on Natural Farming Practices", A Study under NABARD Chair Unit, XIMB, Bhubaneswar.
- Nayak, A.K.J.R. (2014b), "All-India Baseline Study on Natural Farming Practices", A Study under NABARD Chair Unit, XIMB, Bhubaneswar.

- Nayak, A.K.J.R. and Sashimi Nayak (2012), "Optimising Asymmetries for Sustainability: A Case of Nava Jyoti Community Enterprise System in Rural Agricultural Settings", XIMB, Bhubaseswar.
- Poole N and Frece A. (2010), "A Review of Existing Organizational Forms of Smallholder Farmers' Associations and their Contractual Relationships with Other Market Participants in the East and Southern African ACP Region", AAACP Paper Series No. 11, Food and Agricultural Organization
- Rani Nidhi, Gadhe Shruthi and Nayak Ahilesh (2017), "Formation

- of FPO and its Impact on the Development of Sustainable Crop Production in Karnataka, Institute of Agri Business Management", International Journal of Agriculture Sciences, Vol. 9, No. 4, pp 3735-3738.
- Small Farmers' Agri-business Consortium (2013), Impact Assessment Study of Vegetable Initiative for Urban Clusters.
- Verma, Satish (2017), "Farmer Producer Organizations & Agri-Marketing: Experiences in Selected States, Relevance and Their Performance in Punjab", CRRID, Chandigarh.