Understanding Farmer Producers Company (FPC) Consortiums in India

Exploratory study on second level institutions in the FPC ecosystem

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Abbreviations

AGM	Annual general meeting
APMC	Agricultural Produce Market Committee
BoD/BoM	Board of directors/ Board of members
CEO	Chief Executive Officer
FIGs	Farmer Interest Groups
FPC	Farmer Producer Companies
FPO	Farmer Producer Organisations
FWWB	Friends of Women's World Banking
GDP	Gross Domestic Product
HR	Human resources
IFFCO	Indian Farmers Fertilizer Cooperative
MD	Managing Director
MFI	Microfinance Institutions
MSP	Minimum Support Price
NABARD	National Bank for Agriculture and Rural Development
NAFED	National Agricultural Cooperative Marketing Federation of India
NBFC	Non-Banking Financing Company
NCDC	National Cooperative Development Corporation
NCDEX	National Commodity and Derivatives Exchange Limited
NEFT	National Electronics Funds Transfer System
NWR	Negotiable Warehouse Receipts
PGs	Producer Groups
PI	Promoting Institution
PO	Producer Organisation

POPI	Producer Organisation Promoting Institution
PRODUCE	Producer Development and Upliftment Corpus
PSF	Price Stabilisation Fund
PSS	Price Support Schemes
RI	Resource Institutions
ROC	Registrar of Companies
RRB	Regional Rural Banks
SFAC	Small Farmers' Agribusiness Consortium
SHGs	Self help groups
SMHF	Small and Marginal Holding Farmer
VLIs	Village level institutions
WUGs	Water User Groups

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Abstract

Small and marginal producers do not have the volume individually (both input and produce) to get the benefit of economies of scale. This is where the collectivisation concept of working in the form of farmer producer companies (FPC) plays a significant role. Its main aim is to strengthen the position of farmers in the value chain, by realising better price outcomes and/or reducing transaction costs. But along with this it has to overcome the challenges of capital availability, capability needs, and coordination and compliance issues (Singh & Jadhav, 2019). It has to work towards risk sharing among the value chain actors in order to create and sustain the trust. This task involves complex challenges and the conceptual application is still in its nascent stage.

Over the last eight to ten years, there has been a strong momentum in the growth of FPCs. As of March 31, 2019, data available from various sources like SFAC, NABARD, Ministry of Corporate Affairs and others indicate the number of producer companies to be around 7374 (Neti & Govil, 2019). The government in the annual budget of 2019 has also announced for another 10000 FPOs to be formed and promoted and also introduced certain key policy interventions (Bhosale & Sally, 2019). This indicates the increased political attention given to the growing ecosystem of FPO. But without any robust policy framework, the problem of sustainability of these collective organisations would be a concerning area to be focused by the policymakers and other stakeholders. The present study attempts to examine and understand the functioning and role played by the second level institutions (consortiums) in tackling the challenges of FPCs The objective is to examine the various needs and constraints of the FPO federation. The result findings show that the consortiums are in learning stages and bounded with limited capabilities and constraints. At institutional level it has been largely able to tackle the challenges of compliance and coordination of member FPCs. The challenges of capability and capital are still filled with grey areas and the model of second level institutions still has a long journey to cover in this. The consortium model promises a lot and seems to have the potential to strengthen the farmer collectives in the value chain, provided there is an enabling environment developed for the FPC ecosystem.

Keywords: Small and marginal producers, Farmer Producer Companies, Federations.

1. Introduction

1.1 India's agrarian crisis and smallholder farmers

In the past few decades the Indian agriculture has been webbed in crisis and is facing the complex challenge of reversing the deceleration in agricultural growth. The shared value of agriculture in the national GDP has been declining over the years. The primary reasons behind the increasing crisis is the rapid urbanization, followed by rising industrial demand, and increasing population with further land fragmentation (Sharma, 2007). This has added subsequent pressure on the availability of cultivable land.

Further, the agricultural sector in India has been hampered by rising transaction costs, low access to credit and inputs and poor realization of output prices. This coupled with information gap has resulted in poor income outcomes for the farmers especially the small and marginal holding farmers (SMHF). This is also highlighted in the report of Committee on Doubling Farmers Income (2019) set up by the central government. The report findings indicate that the average income of farmers from cultivation increased only by 3.8% (over the decade 2001-2011), but this income increase has been largely of the high income farmers (nearly 7.5 times that of marginal farmers). The NABARD All India Rural Financial Inclusion Survey 2016-17 also points towards the rising income inequality in the agriculture sector (NABARD, 2018).

In order to attain better income outcomes, the smallholder farmers need to process and scale their produce which will help them in attaining better prices in the market. But with lower production, low investments, weak market linkages and low value addition, it becomes difficult for the smallholder farmers to sustain. This has resulted in many farmers taking up unproductive non-farm activities for additional or alternative income source. Another dynamic shift has been of vegetable production which has well suited into their ecosystem. But due to poor understanding of market imperfections the farmers are unable to get better incomes. In the Indian context, value chain framework has not been used to exploit the economies of scale. The agriculture ecosystem has not undertaken growth and development of agricultural value chain; which can be used as a powerful tool to empower the SMHF (Kumar & Sharma, 2016). Also in applied cases the benefits of value chain do not trickle down to the SMHF which constitute the base of the value chain pyramid.

The issue of income insecurity has been affecting the overall development of the primary food producers. And also raises the concern on attaining food security of the nation. This trend is projected to further continue unless there is a set of effective policy options targeting the complexity of agrarian crisis with development of small and marginal farmers at its centre stage.

1.2 Growing importance of Farmer Producer Companies

The FPCs have been seen as an amalgamation of cooperative and private limited company. It carries the cooperative values of mutual benefit and professional style of functioning of a corporate. Its members and shareholders can only be farm producers who have voting rights. The members appoint the board of members who undertake resolutions for the functioning of the FPCs. The FPC issues equity shares to its members, which cannot be publicly tradable but only transferable. Like the traditional cooperatives, it gives (limited) return on capital to its members but also functions under a regulatory framework like private companies. One of the unique features of FPC formation is that it can have individual producers and also producer collectives as its members. It has been viewed that the role of cooperative or producer collectives are required more in the post-production stages like processing and marketing (Singh & Singh, 2013). Thus FPCs can have efficient participation of the FIGs, VLIs, PGs, SHGs, etc to function as a business entity. It has no restriction on its area of operation thus allowing the FPCs to benefit from the economies of scale. The FPCs have reduced the intermediaries present in the traditional marketing channels. It has bridged the gap between producers and buyers. Over the period of time with more market opportunities and operational control, the FPCs are more likely to coordinate vertically in a hierarchical fashion or expand horizontally along the agribusiness value chain or achieve both.

As of March 31, 2019, data available from various sources like SFAC, NABARD, Ministry of Corporate Affairs and others indicate the number of producer companies to be around 7374 (Neti & Govil, 2019). The government in the annual budget of 2019 has also announced for another 10000 FPOs to be formed and promoted and also introduced certain key policy interventions (Bhosale & Sally, 2019). This indicates the increased political attention given to the growing ecosystem of FPO. The Doubling Farmers' Income report (2019) also emphasises on the significant role of FPOs in empowering the producers. The report has recommended for setting up of nearly 7000 FPOs and VPOs by 2022-23. This will target nearly seven million producers across the country.

1.3 Problem in the present and the future

In the modern context, FPC has been presented as one of the effective solutions, an improvised version of the traditional collectives. As concluded by Trebbin and Hassler (2012), in order to benefit from the economies of scale (and reduced transaction costs), there is a strong motivation for smallholders as well as retailers to link producers in the value chain through institution building blocks like FPCs. The benefits of collectivization (read collective action) can be trickled down to small and marginal holding farmers through FPC model. But if not regulated, these benefits are slowly surpassed than its adverse implications.

As observed in various research and studies, the institution building is getting invisible as the ecosystem of FPC has not been developed in the desired manner ((Singh & Singh, 2013); (Mahajan, 2014); (Nayak, 2013); (Singh & Jadhav, 2019)). FPC functionaries has been largely policy driven rather than community driven, leading to non-sustainability of the ecosystem in the longer run. There is absence of balance between top-down and bottom-up approach conceptualisation in the design of policy framework. With more centralized top-down approach limited focus has been given to decentralized system of comprehensive training system and incubation centre for creating viable business opportunities.

This has resulted in closure or FPCs going in inactive state and majority still struggling in the activities of agri-input trading and not moving beyond in the value chain. With certain exceptions the individual FPCs have struggled to sustain the institution and tackle its challenges. Though there have been developments in areas of capability, bargaining, risk taking ability and other areas at FPC level but even this hasn't helped in trickling down substantive benefits to its member farmers. Collective action has its own plethora of advantages followed by challenges. To be specific, the FPC model has huge potential to strengthen the position of farmers in the agricultural value chain. But it has own set of needs and challenges which for a start can be addressed by developing an enabling ecosystem. Institution building and strengthening along with participation and coordination of members and other value chain actors can help in reaping out more benefits. The framework would require more contextual study to apply theories for designing models for functioning and strengthen of the institutions. The current paper tries to attempt to study and analyse second level institutions of FPC as an answer to the needs and challenges of FPC.

1.4 Second level institutions of FPCs in India

The farmer producer organisations have been observed as one of the most effective pathways to deal with this myriad challenge of smallholder farmers. But even this model has its own set of challenges and it needs to be addressed in a comprehensive manner to make the model sustainable. In this context, SFAC undertook an initiative in 2014 to establish State level federations of FPOs to develop a state level umbrella support for member FPCs. The primary objectives of setting up such institutions were to bring strong coordination among FPOs, enable policy dialogue with other actors, access to services and inputs, capacity building needs, avail credit support and establish viable market linkages. With this there was eight such state level federations have been supported and registered under SFAC. The states are Madhya Pradesh, Rajasthan, Maharashtra, Gujarat, Tamil Nadu, Uttar Pradesh, Telangana and West Bengal. But as per the current literature, only a handful of them are actively functioning. Few federations have also been formed and facilitated by resource institutions and are actively functioning.

The state level federations are another form of aggregators which have been proposed to play a significant role in the value chain of farmers. But as we dive into the agriculture value chain, it becomes clear that a single FPC would be unable to expand beyond a point, though there are certain exceptions. Federations as second level aggregators would have the power of more cohesive collectivisation to establish itself as an independent player in the market. It might gain the bargaining power to enhance its price outcomes and also trickle down the benefits to the individual farmers who are connected through the member FPCs. It can be looked as risk sharing mechanism where it focuses towards sharing the risk among all the stakeholders. This would probably fill the trust deficit and make the business more profitable. But as put on paper, there have been various such models and theories which have been pushed in a top-down manner by policy makers to target the agrarian crisis. With so many success and failed attempts and with the larger goal of providing income security to the producers, it becomes necessary to learn from the past decision making and try having a holistic approach. The solution matrix needs to cover all the verticals and horizontals of the system, and attention needs to be given to the crux of the problem.

Will the state level federation conceptualisation work towards strengthening the FPCs (and the farmers) and reap the benefit of collectivisation, is a question which might need various answers. As it evolves, it might face different set of challenges and needs. There might be requirement of changes within the ecosystem and the framework being used right now. What needs to be at the integral of this evolution process is bottom-up conceptualisation. There is a need to balance the top-down and bottom-up approach with more priority given to the contextual parameters. Without which, numerous such policy actions wouldn't be able to fulfil its objective and give justice. And probably, widen the trust deficit between the producers and other actors in the value chain.

1.5 Need for the study

As proposed there will be more producer companies being formed, and with this there will be need of different approaches to sustain the ecosystem. With the introduction of FPC federations as an instrumental tool to strengthen the FPCs position in the value chain, it becomes necessary to understand and analyse the current status and functioning of the same. Currently there are few federations formed across different regions of India. Though their objectives are nearly same but they have different characteristics based on business model, services, growth phase, strengths, weaknesses, challenges and different needs. There is no one-fit in model for these federations. Therefore what pre-defined role the federations have played and how they established the FPCs in the value chain is still not defined. There is need to study all the different models based on different parameters and try to highlight the key lessons. This can be further used to develop a future roadmap for the growth of the FPC federation. The present study is an attempt to fill in this grey areas.

1.6 Research Objectives

The main motive of the research study is to find answers to the question of how the consortium is able to tackle the challenges faced by FPCs and also deal with other challenges of collective action. The primary objectives are further sub-divided into the following:

- Understanding the current status and functioning of state level FPC federations across India.
- Examine the institutional, business, financial and capacity development needs of the FPC federations.
- Identifying the constraints towards access to finance, inputs, market information and FPC federation capacity building.
- Developing a roadmap for the growth phase of the FPC federations.

2 Theoretical Framework

2.1 Institution, social capital and collective action

Historically, human beings have been propelled to form institutions in various capacities and context. It has been believed that individual interests being conflicting in nature would need institutions to work towards collective interest of societal development. Also as observed by Max Weber (1978), institutionalism has emerged in the social sciences in order to better understand the radical bureaucratization of the modern society. In the initial phase, the institutionalist movement explained the functioning of institutions and their influence on society. The concept of an "institution" was then conceived in its formal dimension in terms of concrete organizational structures. However, institutionalism also clarifies the paradigmatic expansion of Rational Action Theory (RAT). The fundamental idea of this is to provide a framework that explains the whole spectrum of human activity on the basis of an instrumentalist and individualist perspective.

In the process of institutional building, two parameters of 'institutional environment' and 'institutional arrangement' play key role (Royer, Bijman, & Bitzer, 2016). The former refers to the macro institutions whereas the latter refers to the modes of organising and coordinating activities within a particular institutional environment. It is the constraints pertaining to these two parameters which decide the path for institutional building. This can be worked through an appropriated institutional arrangement based on coordinated collective action.

A particular aspect of the motivational risks related to any form of collective action is the disengagement of actors due to the instrumental understanding of trust proposed by the commoditized approach of social capital. Social capital is defined as the features of social organization, such as trust, networks and norms that facilitate coordination and cooperation for mutual benefit (Ostrom & Ahn, 2003). In accordance with social capital theory, it is clear that the performance of any kind of institution is highly dependent on the democratic vividness of its related communities. Putnam (1993)emphasizes the idea that institutional performance is directly linked to the social context within which formal governance structures operate. According to Putnam, social capital results in trust through civic networks, norms of reciprocity, and associative organizations (such as guilds, clubs, neighbourhood or religious associations). And a collective approach that has inherited a substantial stock of social capital will generate more voluntary cooperation. In other words, with intense interconnectivity between its members, such communities are better equipped to generate and sustain collective action. But the actors will invest in these approaches only when they are convinced of fetching higher benefits from collective action. However, gathering actors and promoting their connectedness in order to stimulate them to cooperate in line with their private interests is insufficient. The empowerment of the stakeholders should focus on an evaluation of the evolution of their values, because it is impossible to implement a radical shift in economic behaviour.

Using this interpretation of social capital may increase our understanding of how cultural, social, and institutional characteristics of communities jointly affect their capacity to deal with collective action problems (Ostrom & Ahn, 2003). But the social realm is nothing less than an abstraction that results in the aggregation of all non-personal factors and human behaviours are strictly guided by their private interest. This is famously stated by Mancur Olson, “unless the number of individuals is quite small, or unless there is coercion or some other special device to make individuals act in their common interest, rational, self-interested individuals will not act to achieve their common or group interests” (Olson, 1971). If the resources of trust, norms and networks are present, they will render the best outcomes i.e. the least expensive (Luhmann, 1979) in situations of free riding, overexploitation of shared resources (“tragedy of the commons”), or myopic non-cooperation (“prisoners’ dilemma”).

It is also important to note that not all social capital builds the institution and benefits from collective action. In many institutional arrangements, the binding factors for the actor would be of fear and power and not trust. There would be strong coordination among certain actors and benefits being shared among them at the exploitation of others. Therefore in order to generate more collaboration, stakeholders need to create structures that incite actors to find the optimal way to sustain trust, to organizationally acknowledge and learn that process, and to nourish it with the precise normative idea behind the institutional apparatus. It is essential to consider trust and institutions as complex social products that cannot simply be created and evaluated on the basis of the capitalization logic. Based on the context, stakeholders experience difficulties in collaborating in setting up experimental institutions for collective action (Six, Zimmeren, Popa, & Frison, 2015).

The institution needs to enable the stakeholders to understand it as a collective entity with particular values, assisting them in experimenting with different collective action models and adapting its operation to the needs of the civic community. And, collective-action problems affect the structure of stakeholder networks differently in policy settings (Berardo & Ramiro, 2014). However, interactions in policy settings do not usually occur in an institutional vacuum; instead, they are guided and constrained by agreed-on rules. Therefore, to better understand behaviour in these settings, it is important to understand the parameters that guide and constrain it. The present study will examine such parameters for higher-order institutional set up and governance in the case of agriculture value chain promotion.

2.2 Role of collectives in the agriculture value chain

In the process of implementation of diverse ways of enhancing farmer's income, the institutional approach to poverty reduction, agricultural revival and social empowerment is also considered as one of the important ways. It makes a convincing case for a group approach to agricultural investment and production by promoting collectives of the poor, as being much more effective than all other traditional approaches. It has been argued that a group approach to farming, especially bottom-up agricultural production collectives, offers a substantial scope for poverty alleviation and empowering the poor as well as enhancing agricultural productivity (Agarwal, 2010).

Along with this, the market imperfections and the importance of institutions have become a central notion in most economic literature on agricultural development and smallholder market access. Informal and formal rules governing market transactions between competing actors with imperfect knowledge of market conditions have replaced the notion of the "invisible hand in perfect markets". These rules make up the institutional framework (North, Institutions, institutional change and economic performance, 1990) or institutional matrix (North, 1991) in which market transactions take place.

The new focus on institutions has resulted in policy initiatives to make "markets work for the poor" and in adjustment policies in the enabling environment for smallholder farmers (DFID, 2000); (World Bank, 2004); (World Bank, 2003). This has led to a rethinking about the role of the state in facilitating market access for smallholder farmers. The role of marketing boards has become a point for much debate. Instead of direct public interference in markets as a buyer or seller, the role of the state has evolved to provide rules for the creation of effective institutions to regulate and facilitate markets.

With this, we have also observed the changing nature and form of collective action in such institutions. Collective action has been termed out as one of the effective pathways for integrating smallholder producers to high-value and competitive markets. With the increasing transaction costs in agriculture and with no say in the value chain, collective action has been instrumental in empowering the smallholder producers in many ways (Fischer & Qaim, 2011). The smallholder producers who have been the underserved communities, with the help of collective action have been able to access and participate in the input and output markets of agriculture value chain (Kirui & Njiraini, 2013). However, though the farmers groups are formed on concentrated interests but there are factors of composition and characteristics of individuals and member mobilisation method (which links to group behaviour) which determine the nature of outcome.

The nature of collective action in agriculture has moved from cooperative structure to an enterprise structure. More emphasis has been laid down on the economic empowerment of the members in a collective. This has been well depicted in the work of Bijman (2016). The author has highlighted the '"changing nature of farmer collective action" in the agrarian livelihood context of developing countries by drawing out three large trends,

a) Transition from focus on resources (access to inputs, credit and technology) and capabilities of producers towards improved access to market. This is interesting, as for market access or proper business functioning of the PO there is need of resources and capabilities, in the form of investment in developing leadership, management and marketing skills of the producers;
b) Transition in policy process from community-oriented towards member-oriented policies. The traditional collective action was more focused on social and economic prosperity of the entire community. In the PO model the focus is primarily towards economic prosperity of only the members of the organisation.
c) Transition from policy orientation towards market orientation. Rather than working towards efficient policy making, the farmer collective action has shifted its orientation towards placing itself in the market (as a buyer or supplier or both). They have made their way into agricultural market value chain.

The first transition is important as it draws variables needed to work towards the changing nature of farmer collective action. The variables need to be developed in order to achieve economic benefits for the PO members through market orientation.

In the second transition, the author raises the concern of inclusiveness of PO. In a market-orientation structure, emphasis has to be given to producers who are interested and willing to be owner of the PO. The PO might have to expand beyond its region for business opportunities and lose out with its regional identity. Thus community inclusiveness at local level might not be there. But it is important to understand here that, even a collective of members under a PO is also another form of community. Thus in a way the benefits of PO is served to a particular set of 'community'. And over a period it is possible for the PO to incorporate the community at local level. But the specific question to address is the social inclusiveness primarily of caste, class, gender and age. This lays an impact on the participatory decision-making and sharing of benefits among the members.

In context of the third transition, the author further observes that, with market orientation (preference to selling farm produce rather than agri-input supply) benefits adding to the producers income, the traditional PO are willing to carry out market activities. But there are two major constraints which pose as challenges to sustain in this transition. Firstly the producers need to develop capability to understand and manage the new intervention and secondly, the state policies are largely favoured towards input stage of agriculture (subsidies, credit support, and technology assistance) and not towards strengthening income security of the producers.

The transition towards market-oriented policies does ensure economic empowerment of the producers but it also has implications on the governance, leadership requirements and relations among actors. The internal governance in market-oriented transition is hampered by heterogeneity of membership (Bijman, 2016). This reduces the overall efficiency and effectiveness of collective decision making. In order to sustain this transition requires a separate set of leadership qualities and skills. This requires external assistance and hand-holding in the initial stages. With market-oriented activities there comes the requirement of capital which has its own constraints. This also has an impact on the member commitment. And as explained earlier, member commitment and interest acts as a key determinant in preventing the collection action problems. With more integration into the markets, there will be demand of vertical coordination in the PO structure. And the increase in hierarchy in member-PO relationship will tend to reduce the member commitment.

2.3 Farmer Producer Companies in India

In order to overcome the declining productivity and the income levels of farmers, the GoI constituted a committee, which recommended several ways to double the income of farmers by 2022. However, achieving this target is not going to be so easy. In India, there are many forms of legal entities by which primary producers can collectivise and form institutions for enjoying benefits. Farmer Producer Company registered under the Companies Act, is one such legal entity aimed towards empowerment of small and marginal holding farmers in the value chain.

The farmer collective or enterprises in the Indian context were first organized under the Co-operative act of 1904 made during the British Rule. The concept of collective action in the form of 'agricultural credit cooperatives', was implemented in rural India under the patronage of Government. Post-independence the movement gained momentum and cooperatives were set up nationwide. A major emphasis was given to the agricultural commodities like poultry, fisheries and dairies with strong support from Government's cooperative departments and various other institutions. One of the prime examples would be of the 'Operation Flood' under which the world's largest dairy development program was conducted. Dairy cooperatives were set up to directly procure milk produce from the (dairy) farmers. This approach of collective action has helped the producers in a multidimensional way. Another example would be of the Indian Farmers Fertilizer Cooperative (IFFCO) which today has a 35% share in the fertilizer and seeds market. Similar cooperatives are present in the cotton, sugar, hand-weaving sector with a market share of nearly 60%, 58% and 55% respectively (Das, Palai, & Das, 2006).

The cooperatives have successfully played multi-functional roles in the Indian market with its presence in various sectors. The primary role of cooperative has been to build linkages between producers and markets and to develop economic democracy at the regional level. But even with a history of over 100 years into existence, the traditional cooperative form of organization has not been able to effectively deliver its objectives. The performance and operations of the cooperatives have been largely hampered due to huge government intervention (and not a peoples movement), mismanagement, lack of awareness, restricted coverage and functional weakness. These constraints are well etched in the very nature and principles of cooperatives form of organization. The story of cooperatives have been reflected in various other collectives like Self-help groups (SHGs), Farmer Interest Groups (FIGs), Village Level Institutions (VLIs), Producer Groups (PGs) etc. The pitfalls resulted in demand of an alternative legal framework in order to give more autonomy to the cooperatives to function as business enterprises. This led to the formation of Farmer Producer Companies (FPC), which is a legal entity formed after amendment of section 181 (part IXA) of the Indian Companies Act 1956 in 2003.

FPCs are slightly different from the earlier forms of collectives, in that they enjoy legal provisions for sharing profits earned by way of dividend (Ramappa & Yashashwani, 2018). They also offer a better price for the produce they procure from the members, thus benefitting the latter. The main aim of a PO is to enhance farmers' competitiveness and to increase their advantage in the emerging market opportunities. The major operations of FPOs include procurement of inputs, market linkages, networking, facilitating finance, processing and quality control, trainings and technical advice.

A collective like FPCs is formed towards enhancing the socio-economic gains of its stakeholders. It works toward developing group management initiatives (group structure, governance and management), resource management initiatives (resource pooling in terms of manpower, time and fund management), network management initiatives (partner networking with actors/institutions), production management initiatives (quality, standardization, skills and knowledge sharing) and marketing management initiatives (primary and secondary processing, product specificity and product placement). There is a large ecosystem of marketing activities ranging from transport, infrastructure in markets, assaying, warehousing, storage, finance etc which can be handled in a collective manner at FPC level. The spread of FPOs, both across space and time since has necessitated more detailed research and consolidation and there is no single location where researchers could access the existing research. A literature review of interventions facilitating smallholder farmers' access to markets in India by Vrutti and the Institute of Rural Management Anand (IRMA) has through a systematic research review put together some of the key research on FPOs. An annotated bibliography that followed has combined the material from peer-reviewed literature with those available in forums such as Livelihoods India reports and several round table and conferences on FPOs (Prasad & G, 2019) . The set of 72 articles reviewed until March 2018 show that the literature has a mix of case studies (28), conceptual reviews (23), empirical analysis (10), policy briefs/guidelines (4), research reports and round table discussion reports (7). This gives a brief introduction to the growing ecosystem of FPO in the Indian context. A paper written by Shambu Prasad (2019) gives a brief picture of the ten years of FPO movement in India. The author covers various literature, studies and key lessons learnt from the growing movement of the FPO.

In addition to the published literature there are newer insights emerging on lending to FPOs and a new training manual on FPOs which have sought to bring together more contemporary insights drawn from innovations in the space. Apart from the FPO manual there have been many manuals and self-development modules that have been brought out by organisations such as Centre for Indian Knowledge Systems (CIKS) or AP Mahila Abhivrudhi Samiti (APMAS) both in English and in Tamil/Telugu[1]. Future research would be better advised on drawing from these leads and field visits and stakeholder consultations and participation that could help both reduce the gap between academic institutions and practitioners and work towards common frameworks and understanding for newer actionable knowledge.

2.4 Needs and challenges of FPC ecosystem

With the changing nature of collective action in agriculture shifting towards market oriented structure, it becomes necessary for the producers to be at the integral of the market value chain. In absence of which, the small holder producers do not get better outcomes out of the agricultural activities. It has been well conceptualized that the benefits of collective action by forming farmer producer organization will lead to economic empowerment of such interests groups. But the journey towards prosperity is filled with endogenous and exogenous constraints. As explained by Pustovoitova (2011), the major institutional challenges for a farmer collective like FPC are: farmers drop-outs (also inactive participation); increasing ownership issues; members opting for traditional routes; lack of liquidity for aggregation and transport; inadequate infrastructure for storage and processing; market information etc. The

1 See http://ciks.org/our-publications/producer-companies/ and http://www.apmas.org/pdf/flyer-on-modules.jpg for more details. A manual specific to Maharashtra's agricultural competitiveness project is available at http://gtw3. grantthornton.in/assets/i/Intrapreneurship_and_Management_for_Farmer_Producer_Companies.pdf

solutions for tackling such constraints have been well defined by Mahajan (2014). The author highlights importance of capital requirements and capacity (read capability) development to achieve the goals of such collective action. There is need of both capital and capacity development to be intertwined and fulfilled at each and every stage of FPO. With the study of Singh and Jadhav (2019), the challenges of FPC have included compliance and capability along with capital and capability. The policymakers have been working towards creating an enabling environment to strengthen the FPCs but have not succeeded in addressing the specific challenges at institutional level.

Whereas a lot of emphasis has been given on the mobilisation and formation of FPC collective not much has been done about the benefits of the collective action. Without which the collective formed remains dormant and there is no ownership developed in the process. After certain amounts of benefits are generated, the varying level of commitment of individuals as explained by Olson (1971) and Fischer (2011) leads to the problem of free-riding. According to Olson the ‘free-rider’ problem generates as only certain individuals work and benefits are shared by everyone. These participants do not find any incentive in working towards collective interests. This will have implications on the participation in collective activities and raise the concern on sustainability of the group formed.

FPC ecosystem includes: input supply (seed, fertilizer, machinery); financial and technical (credit, savings, insurance, extension); training and networking (HRD, policy advocacy, documentation); marketing linkages (contract farming, MSP procurement). But proximity contestability has led to marketing problem in the ecosystem. There has been a widening gap between markets and FPCs and absence of competitive markets which are thick rather than thin (less monopolistic). Due to absence of any reliable risk sharing mechanism the institutions have been incapable of taking alternative activities and linkages.

Apart from access to market, a PO faces issues of scarcity of capital, lack of knowledge and information and non-availability of quality inputs. To fully function as a business enterprise, the PO needs to overcome all of these challenges. These are challenges which might arise from time to time, thus there is no permanent solutions to it. At best, the PO ecosystem can be developed in such a manner that it can be resilient enough to the shocks/ crisis arise out of the constraints. With capital the availability of quality inputs can be dealt with (provided there are regional suppliers to it). With capital and proper knowledge of business entities, the problem of access to market can be resolved to an extent. Information asymmetry is one of the major reasons that the individual producers have failed to understand the consequences of agrarian crisis. For example, the extensive usage of chemical fertilizers and pesticides has resulted in soil degradation and groundwater deterioration. Since these are common resources, there can be no resistance drawn by individuals to save themselves from the practice of larger communities. There is over-exploitation of groundwater used for irrigation. At an individual level, the farmers have not been able to picture of the mammoth water crisis which will badly hit the agrarian sector. The government provides with extension services to fill these gaps but many are left out of all these. Lastly, the market entry is restricted, very competitive and exploitative in nature.

Thus for a PO, which procures the produce from its members and moves to market for fetching better incomes, will be hampered by the above mentioned constraints. The formation and functioning of the PO need to have integral solutions to tackle all of these. As suggested by Ostrom (2003) networks, trustworthiness and rules are the pillars of institutional building. This when applied to collectives in agriculture value chain make the farmers move towards collective action and mutual benefits. There is no doubt that the formation of producer organizations is advantageous to the small and marginal farmers, but there exists no clarity with regard to the choice of an appropriate structure for FPOs.

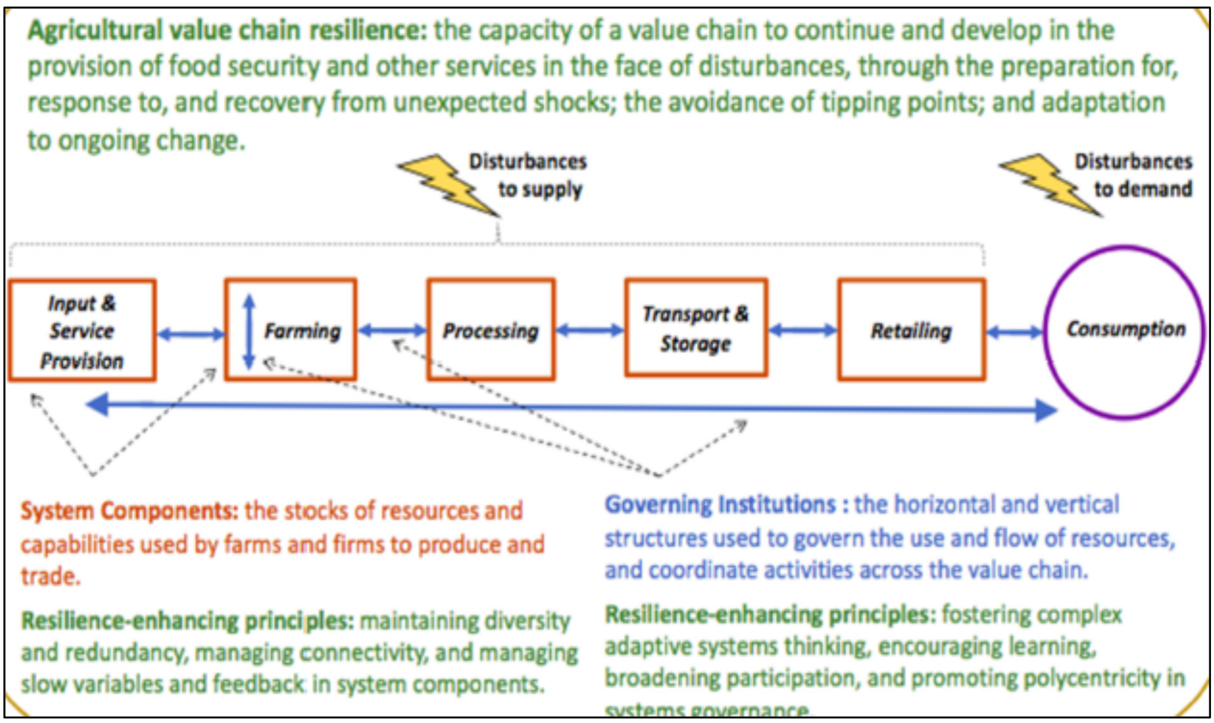
2.5 Strengthening the value chain in agriculture

Value-chain promotion does not reach chronically poor people because a minimum level of resources (e.g. land, knowledge, capital) is a necessary prerequisite for inclusion in a value chain. Another factor that influences the broad-scale effectiveness of the promotion is the choice of the product to be promoted. For instance, although staple foods for the domestic market offer lower profit margins than higher-value export products, they also present lower barriers to entry and lower risks (e.g. in relation to global price fluctuations).

Traditionally the SMHF have been victims of buyer-driven value chain model where they hardly receive any substantive price outcomes. The buyer offers for procurement at door step, pays in cash, and at time provides up front credit; and prevents the producer from negotiating at a better price. If the producers have quality volume and market linkages established even a buyer-driven model can turn out to be effective.

The study of resilience of agriculture value chain becomes important when, a) the value chain is quite unstructured; b) weak coordination leading to trust deficit issues or c) there is need of multiple actors and value chain segments to achieve better outcomes (2008). A larger section of FPCs formed in India, have been largely conceived and implemented as an end rather than as means to achieve objectives. The momentum gained as there was a rapid growth with formation of FPCs in large numbers across the country. But not much emphasis was given on the ways of tackling the value chain constraints. Therefore if the FPCs have to effectively tackle the value chain constraints; it needs to be looked as a means to achieve an end and not as an end in itself. In figure 1, Vroegindewey and Hodbod (2018) have summarized the resilience framework for agricultural value chain. The figure shows the system components in orange boxes (e.g., the resources and capabilities used by input and service providers) and governing institutions represented by the blue bilateral arrows (e.g., horizontal structures such as producer organizations, vertical structures such as contracts between producer and processors, and chain-wide structures). The authors highlight seven categories of principles related to enhancement of agriculture value chain. The principles are focused at strengthening the value chain, system components, governing and managing institutions.

Figure 1 Resilience in agricultural value chain



The first category of principles involves maintaining the diversity and redundancy of system components (e.g. maintaining multiple types of producer, processors, and/or distributors in a commodity value chain) and also provides substitutes for components that may fail in the face of a disturbance. Second, managing the connectivity between components can facilitate flows and constrain the spread of a disturbance. For example, infrastructural linkages such as MIS, and cell phone connectivity facilitate the flow of goods and information. The third category is to identify and manage the key variables and feedbacks that interact to determine the configuration of a system. This builds on the first two principles, as configurations will depend on the patterns of change that system components are undergoing. For example; whether the commodity production is increasing, decreasing, or is stagnant and also the linkages between components and actors, i.e., the relationship between productivity and investment in processing. The other category of principles interacts about the structure of value chain components. The first is maintaining the flexibility of components to take different positions and adapt operations to changing requirements with minimum time and effort. Flexibility can be linked to the diversity principle, because it is created when value chain actors depend on a diverse portfolio of human resources, products, suppliers and buyers, and income sources. Another category of principles interact in maintaining a redundancy of value chain resources that perform the same function in the value chain.

The author also highlights certain principles related to characteristics of institutions that govern and manage the value chain system. The first principle is to foster in institutions holistic thinking that adequately reflects the complex and adaptive nature of the systems that these institutions monitor and manage. For example, such holistic thinking in value chain of poultry products would consider the implications of artificial insemination to meet the increasing demand. The second principle is to encourage institutional learning that is adaptive, collaborative, and focused on multiple scales, which can aid decision-making, change perceptions and norms, and galvanize collective action. Third, broadening the participation of relevant stakeholders in institutions can bolster the legitimacy of systems governance, enhance information-gathering and learning about the systems, and strengthen decision-making especially in response to change. For example, in the poultry sector, bringing producers into decision making process is integral to understand the applications of technologies into the regional context. The fourth principle is to promote polycentric governance, “in which there are multiple interacting governing bodies with autonomy to make and enforce rules within a specific policy arena and geography”. For poultry, the components of polycentric governance might include producer collectives that organize individual farmers at local levels; farmer unions that represent the collectives at regional or national levels; and different vertical value chain relationships that facilitate trade among the value chain actors. There is need of collaboration with other chain partners, with government agencies and even with competitors.

It is to be noted that building an appropriate level of resilience will sometimes require the value chain to make significant capital investments or operational changes that increase the per unit cost of its marketable goods and services. Where resilience generates positive externalities outside the chain, the value chain actors should also consider developing partnerships with other industries, government etc to help share the costs.

With repeated successful transactions (of value chain activities) in the early stages, the social capital is strengthened and instils trust and confidence to further enter into collective action (Chemonics Intenational, 2008). The value added can be of any type but the objective should be to benefit the producer and institutions involved. This ranges from backward linkage activities like regular supply of affordable and quality agri-inputs and farm machinery, extension services, to forward linkages like grading and packaging, bulk trading of commodities. The benefits are in the form of informed decision making, enhanced capabilities, better price outcomes, reduced transaction costs etc. This results in building confidence among the stakeholders to share the risks in the transactions.

It is essential for the value chain activities to gradually move towards meeting the market demands. This would ensure better price outcomes along with significant growth potential. But even in this process the focus should not be restricted to only meet the industry demands rather it should also expand the market outreach for the specific commodity and its value chain. For example if there is a value chain to provide maize to a processing plant, there is need to identify other value addition services for better outcomes. It should also cover different market areas where there would be deficiency of the commodity in a given time frame. Such practice would ensure a sustainable value chain activity for a particular commodity. The FPC needs to take the agriculture value chain approach and work towards strengthening the position in the value chain. With this the FPC would be able to build its strategy at each and every stage and work towards better outcomes. In order for all the actors to benefit from the value chain there is need of strong coordination and linkages which will be fuelled by culture of trust. Once trust will be there different players would have confidence in taking risks which now will be shared among the chain.

2.6 Aggregation of farmer collectives at higher order

The business planning for a collective like FPC is essential as it needs to work on a value chain model. Value chain comprises all the activities at different yet interlinked stages that add value to a particular commodity through the different phases of production, including procurement of raw materials and other inputs. It will be an impossible and not viable task for the FPC to take over the entire value chain. For a sustainable agriculture value chain, there is need of close linkages among the producers, input suppliers, traders, processors, government agencies, retailers and other value chain actors to coordinate supply and demand (Gulati, Minot, Delgado, & Bora, 2005). For the farmer organisation, the produce without requisite quality subjects to higher transactions. And this is quite predominant as there is information asymmetry largely found between the producers and other value chain actors. The transaction costs increases with inadequate infrastructure. In such cases institutional forms of vertical coordination are found to be effective in building strong linkages.

As observed in various literatures, the FPCs as institutions have largely failed to benefit from collective action and in capable to establish coordination along with the value chain actors. Its institutional settings and performance (also stated as ‘first order governance’ by Kooiman (2003)) has failed to solve socio-political problem and opportunity creation for the small and marginal holding farmers. It would be a weak assumption that problems are solved or opportunities are created within the ‘ideal’ institutional arrangements (with conditions). It can be studied that whether challenges of one particular collective can be addressed by further collectivisation of multiple such collectives at a higher order. There would be need of neutral outsider to help build trust among the participants in collective action. Separate institutional settings would be required to tackle the above challenges (also known as second-order governance). The primary objective of the higher-order governance would be to create informed and incentive-generating governance working towards attainment of better outcomes (Webber & Labaste, 2007). In this the focus changes from considering governing as a process towards structural aspects of governing interactions, controlling or enabling problem-solving or opportunity-creating practices. It needs to work towards strengthening of human and social capital for developing the institutions (Pretty & Ward, 2001).

The institutional aspect of value chain development should be at the integral of the institutions collective work. It should identify the key actors from the producers and coordinate with them to enhance value chain activities. This might not be an easy task to develop commitment at all stages but this would ensure decentralized governance.

There is need of interventions needed to address the environmental and operational challenges of FPCs, which is clubbed in the following manner (COMCEC Coordination Office, 2015):

- More involvement of small and marginal holding farmers (especially women) not restricted to mere membership
- Weak or unaccountable leadership
- Weak linkages and relationships with other actors in value chain
- Technical challenges related to production and marketing
- Institutional capacities of organisational governance, legal compliance, financial constraints and social capital building.
- Involvement in policy advocacy

The activity taken by the institution should depend on the magnitude of value addition and which can be handled by the FPC in its limited capability. And this limited capability would create constraints in scaling up the respective value chain activity or even taking up diversified activities for revenue generation. Collectivisation approach can be applied at different orders as we have seen in the cooperative structure of Amul (dairy) and Mahagrapes (grapes) and various other examples. It is believed that challenges of collective action can be controlled and tackled at a higher order of collectivisation involving same set of institutional members. But the success stories have been largely constrained to homogenous commodities like dairy, poultry, specific cash crop like tea, coffee, cotton etc. In cases of diverse basket list of farmer produce there is still a dearth in literature.

It would be interesting to see whether the challenges of collective action are same or intensified at a higher-order of collectivisation. In either case it would be important for the new institution to tackle its own challenges along with challenges of its members. Therefore at higher order institutional, a ‘shared vision’ is to be placed at the integral of the collective action. And the key drivers of the institution need to commit towards this common collective objective. Without social capital not being build up the overall development would be constrained. Therefore the institution formation needs to address both formal (rules, law and constitution) and informal constraints (behaviour of actors, conventions and self-imposed codes of conduct). It needs to fill in the gaps and constraints observed at the lower orders of collective action. This has to be supplemented by clearly defined boundaries (roles and responsibilities), mixed perspective and strong inter-relationships. Without which there would be issues of confusion, low effectiveness, inefficiencies and loss of opportunities. One needs to examine the different such models which can be designed to strengthen the FPC in its value chain. The present study attempts to examine one specific model of consortium or federation and study its value chain model and business activities. It will study the hypothesis of impact of second-order governance on the first-order. This will be a study of the institutional performance, organisational structure and governance and business models of the new institutional arrangements. And will analyse the needs and constraints of the same. The aim is to study the viability of the aggregation of FPCs at higher order in terms of extent to tackle the challenges of the FPCs by meeting the needs.

3 Research Design and Approach

3.1 Research questions

In accordance with the research objectives discussed in section 1.4.2 above, the framework is designed to capture the optimal responses to explore the objectives. The research questions focuses on the dynamics of institutional building and performance of the federations/consortiums and its implications on its members. Following are the key question areas based on which the data collection would be designed:

- What is the organisational structure, governance and value chain activities carried out by the federation/consortium?
- What are the needs and challenges of the federation/consortium?
- How has the federation/consortium been able to tackle the challenges of collective action in its institutional framework?
- How has the federation/consortium resolved or tackled challenges of individual FPCs?
- What role has the federation/consortium played in strengthening the FPCs position in the agriculture value chain?
- Does collectivisation at higher order help in scaling the benefits and developing the institutions?
- How the consortium does control the expectations of the FPC institutions?

3.2 Framework development

As the context and ecosystem of FPC federation is in its nascent stage, and is evolving, the current study is an exploratory research on the state level FPC federations in the Indian context. With the exploratory approach there are initial research grounds developed on the FPC federation context which have been further used for more conclusive researches. The framework developed for the study is an attempt to discovery of various ideas and thoughts which can be further applied in the growth phase of the FPC federations.

The methodology adopted for the study aims to explore and examine the objectives. It is primarily a qualitative study with more focus on intricate details related to overall organisational structure and performance. As of now there are total of eight SFAC registered state level consortiums of FPC federations apart from few independent federations across the country. The lifespan of all the federations are not more than five to six years. As per the secondary data research, majority of the federations (with two exceptions) are registered as farmer producer companies under the companies act 2013. Out of this only a handful of the organisations are in active state and have some sort of literature present (in the form of articles, interviews, website etc). Based on which the instrument used for data collection has been divided in two ways:

- Field visits and primary data collection for the FPC federations which are in a relatively active state, and,
- Telephone surveys for FPC federations which are active (and not accessible due to various constraints) or who are nearly in a dormant state.

The federations/consortiums which have literature stating their current activities have been given preference for field visits. Apart from this, information has been gathered through desk based research and interviews of certain experts from the respective domain of FPC. This has also helped in designing the framework for the study.

The exploratory framework needs a diversified list of subjects for redefining the problem and studying of the objectives. For which the study has covered six federations/consortiums through in-detailed qualitative study and three others through telephonic conversation. This number is optimal for to understand the status of federation/consortiums across India along with their characteristics, needs and challenges. Since it is an exploratory study and no substantive literature is there on the study topic, there was no rigid framework applied in terms of norms and protocols for every federation/consortium visited or observed. The approaches and questions varied based on the context of the subject. Main idea was to cover as many aspects of the federation/consortiums which were available and possible.

3.3 Study area and sampling

The FPC federations/observations observed or identified during the study are spread across geographies in India. They are working on different models and have their own success, failure and learning experiences. This gives a comprehensive outlook to the exploratory study and helps in developing a comparative analysis. There are nearly 21 such FPC federations/consortiums. Out of which nearly 11 are in functioning state. Out of this six were part of the field visits; three were covered through telephonic surveys and two denied for any information exchange. For FPCs not in active state, their story behind dormancy was tried to be collected through telephonic and email conversation but only two respondents responded back. There are four more federations/ consortiums that were not covered or contacted by any means as either they were newly formed or they were not at all promising (based on the responses of federations/consortium part of the study).

For FPC federations in relatively active state, purposive sampling was applied to select samples which were studied and examined through an in-depth analysis. As of now, following table 1 below is the list of all the FPC federations registered in India (this list is based on restricted data available through various sources):

Table 1 List and details of state level federations in India

Sr no	Name	State/City	Year of formation	Type of formation	No. of FPCs	Active or dormant (relatively)	Part of field visits
1	MahaFPC	Maharashtra 23 districts	2014	FPC and registered under SFAC	302	Active	Yes
2	MBCFPCL	Madhya Pradesh 43 districts	2014	FPC and registered under SFAC	109 FPCs + 47 cooperatives	Active	Yes
3	GUJPRO	Gujarat	2014	FPC and registered under SFAC	29 FPCs + 05 cooperatives	Active	Yes
4	TRPCL	Telangana	2014	FPC and registered under SFAC	05	Dormant	No
5	UPPRO	Uttar Pradesh	2015	FPC and registered under SFAC	22	Dormant	No
6	All Rajasthan Small Farmers Agriculture PCL	Rajasthan	2015	FPC and registered under SFAC	31	Dormant	No
7	Bangia Farmer PCL	West Bengal	2015	FPC and registered under SFAC	04	Dormant	No
8	Tamil Nadu Consortium of FPCL	Tamil Nadu	2015	FPC and registered under SFAC	35	Active	Yes

Sr no	Name	State/City	Year of formation	Type of formation	No. of FPCs	Active or dormant (relatively)	Part of field visits
9	Devanandini MahaFPO Federation	Maharashtra	2019	Section 8 company (non-profit)	680	Active	Yes
10	Sahaja Aharam Producer Company ltd	Telangana (work in 2 other states of A.P. and Maharashtra)	2014	FPC	20 producer cooperatives, 1 consumer cooperatives, 2 producer companies, and individual farmers	Active	Telephonic survey
11	Krushak Mitra Agro services pvt ltd	Maharashtra	2015	Unlisted private company	08 FPCs	Active	No (organisation has declined the request)
12	Utkal Krushak Samanwaya PCL	Odisha (20 districts)	2016	FPC under Companies act 2013	55	Active	Yes
13	Harihar Bazaar	Chhattisgarh	2017	Federation	04 FPCs, 05 cooperatives, 13 woman SHGs	There is no sufficient data in this regard	No
14	IndiAgro Consortium PCL	Gujarat	2018	FPC under Companies Act 2013	22 FPCs	There is no sufficient data in this regard	No
15	Vidarbha Agricultural & Allied Producer Company Limited (VAAPCO)	Maharashtra		FPC under Companies Act 2013	25 FPCs	Active	Telephonic survey
16	Vasundra Agri-Horti Producer Company Limited (VAPCOL)	Maharashtra	2009	FPC under Companies Act 2013	55 FPCs	Active	No (organisation has declined the request)
17	Latur District FPCL	Maharashtra	2016	FPC under Companies Act 2013	20 FPCs	There is no sufficient data in this regard	No
18	Manavlok Consortium FPCL	Maharashtra	2016	FPC under Companies Act 2013	06 FPCs	There is no sufficient data in this regard	No

Sr no	Name	State/City	Year of formation	Type of formation	No. of FPCs	Active or dormant (relatively)	Part of field visits
19	Asian Consortium FPCL	Madhya Pradesh	2018	FPC under Companies Act 2013		There is no sufficient data in this regard	No
20	Mega-agri Consortium FPCL	Tamil Nadu	2015	FPC under Companies Act 2013	22 FPCs	Active	Telephonic survey

Note: Details are restricted to the limited literature available. Complied by author

3.4 Data collection and field visits

The study involves both secondary and primary data collection methods. The former method was used in the initial stages of framework development. Along with it, a basic understanding of the status and functioning of the federations/consortiums were collected over telephonic conversation with the identified respondents. This helped in selecting the samples for the study and delisting which will not be part of field visits (due to various constraints).

In case of primary data collection, an unstructured questionnaire with open-ended questions has been used to capture qualitative responses on various parameters related to the functioning of the FPC federations. The questionnaire has been majorly classified on the basic profiling of the FPC federations and the business activities or model adopted by the federations. Under the basic profile, emphasis has been on important details of federation related to organisational structure, management and governing body and on other key governance aspects. Under the business profile, four key areas of capital, capability, coordination and compliance aspects of the federation have been covered. This consists of the backward and forward linkages provided by the federation to its member FPCs to work on value chain activities.

The samples selected for field visits had been communicated before hand to take appointments. The CEO or any concerned authorities were conveyed through email and/or telephonic medium. Through this a target of covering at least five to six FPC federations had been planned. And the final numbers selected were totally based on the availability of the subjects. Field visits were initially planned to be for a period of four to five days for each subject but due to various constraints it was limited to two to three days (with certain exceptions).

The CEO/MD and the staff members were interviewed in person, whereas the board members (only selective ones) were part of focus group discussions. If all board members were not possible special request was made to interact with chairman and few key players. This formed the core sources for data collection required for the study. Apart from this wherever possible certain FPCs and their board members were also interviewed. This helped in analysing their experiences of being part of the consortium. And in certain cases field visits also consisted of visiting certain FPC sites were procurements were happening and/or there were infrastructure like procurement centres and processing plants etc.

3.5 Limitations

With the limited or constrained literature on the FPC ecosystem and especially the FPC federation, the study has been affected by many limitations. For instance, only a handful of the FPC federations listed in table 1 had a dedicated website and further very few had their webpage updated on a frequent basis. Majority of the FPC federation registered under the SFAC had no specific contact details to approach any personnel for gathering information. There were FPC federations which had been formed by either third party NGOs or other such organisations. Such parties were reluctant to be part of the FPC federation study as their model is still under experimental stage. Federations with whom successful communication were established found it difficult to allot complete time for field visits as they had a tight schedule and were engaged in their ongoing operations. There were certain federations who didn't respond on time and missed out of the field visits but were covered through telephonic surveys. And few federations/consortiums were encountered during the field visits and it was difficult to confirm on field visits through established communication modes. These were selected in the list of telephonic survey. With telephonic survey there are time constraints and strong chances of filtering in the data.

Thus with such limitations, planning and getting approval for the field visits and conducting it was a tough task. And more importantly with exploratory research and use of purposive sampling and unstructured questionnaire, the study would be biased with the author's point of view and understanding of the subject.

4 GUJPRO Agribusiness Consortium Producer Company Limited

4.1 Organisational Structure and Governance

GUJPRO is a consortium of FPOs from Gujarat formed in the year 2014. It was part of the state level producer companies registered under SFAC. GUJPRO has been constantly working as a facilitator to advance and policy interests of its member FPOs and member farmers. The organisation has two broader objectives which can be further fragmented:

- Act as an interface between its member FPOs and the buyers for various market linkages.
- Attain income security for its member FPOs and member farmers by entering into the value chain activities through an integrated approach and addressing the issues at every stage.

It was promoted and facilitated by Sajjata Sangh[2] (Ahmedabad) which is a network of prominent civil organisations (primarily NGOs) working in agriculture and rural development. And the platform is provided by Development Support Centre Foundation (Ahmedabad) which facilitates Sajjata Sangh with its resources and networks and has also promoted four FPOs which are now members of GUJPRO. In fact GUJPRO and Sajjata Sangh work from DSC office in Ahmedabad.

FPCs in Gujarat (formed through network partners of Sajjata Sangh) have mostly come up from the development interventions in rural development particularly in NRM and agriculture sectors. Therefore the consortium genesis is in development of social capital at the village level in the form of Pani Samitis, Watershed Committees, Farmers Clubs, SHGs and other forms of community institutions. With the presence of DSC and network partners like Sajjata Sangh, the institutional members have confidence and trust along with GUJPRO.

It started with ten FPC members in 2014 and now it has 29 FPCs and five cooperatives as members. The FPCs have been facilitated by different resource institutions or promoting institutions. Only few of the member FPCs have reached into a relative mature stage and have a long life-span. They are also the early FPCs of Gujarat state. The member institutions are spread over 13 districts of Gujarat state covering different geographies and context.

2 Sajjata Sangh network has 22 NGOs and CSRs as its members and is involved in policy advocacy as well as in promoting innovations in rain-fed agriculture. It is involved in capacity building of NGOs and networking events in partnership with NGOs, Govt. departments and other stakeholders (source: DSC website). For more info on Sajjata Sangh and DSC please refer to:

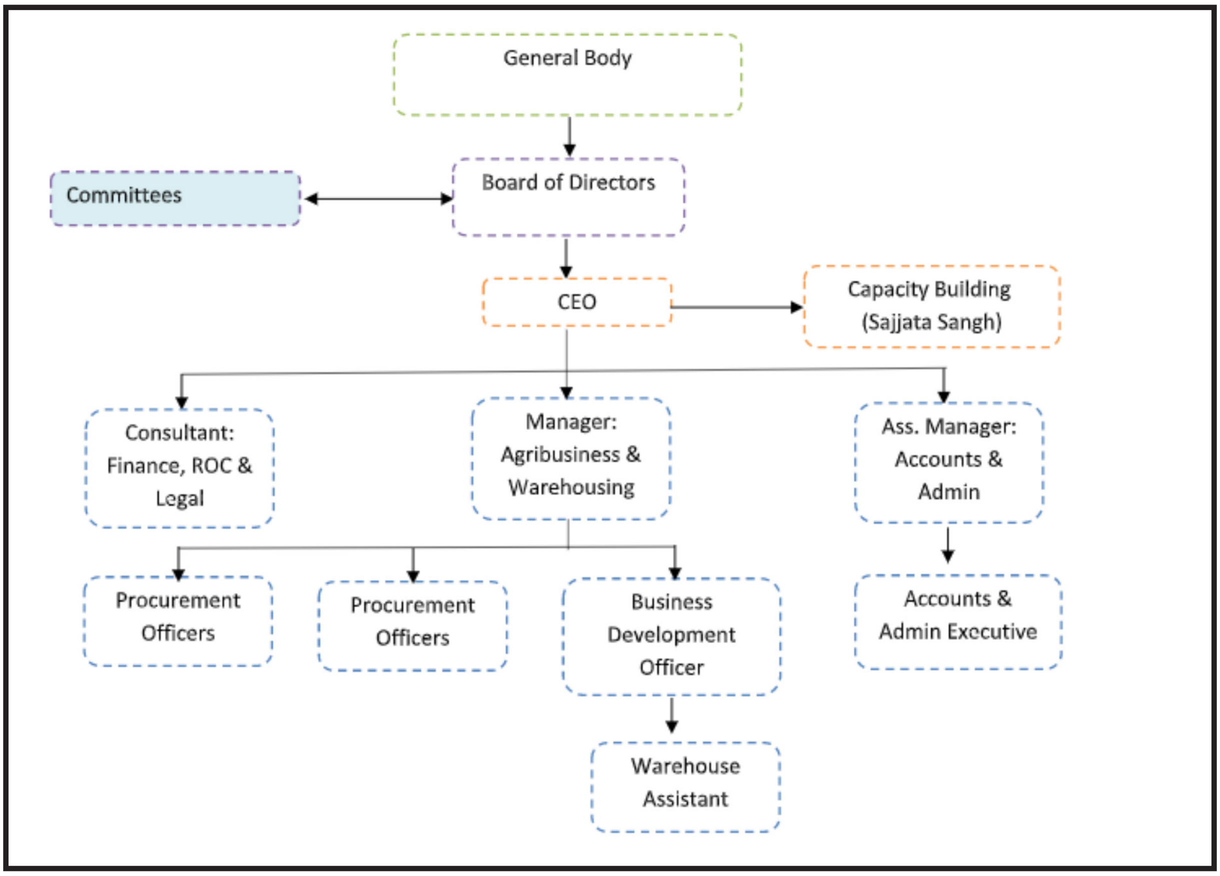
Through its member institution it has an outreach to over 45000 producers in the state. Now for the addition of new members, the FPCs have to comply with a set of compliance criteria.

It has total of seven boards of directors in the governing body (with one female representative) which represent different clusters. These clusters cover group of FPCs from a particular region. With a smaller board size collective-decision making becomes efficient but representativeness in terms of power to vote becomes an issue. The board members are nominated from within the cluster groups and directly selected. The selected board members have huge experience in leading their respective FPCs. They constitute of the progressive farmers who have developed leadership skills and managed their functionaries. As of now, the rotation policy as per the ROC rules are in practice and no such specific removal or replacement of board member rules is there. They meet every quarter for the board meeting and the frequency increases in cases of operations. The board members and other management members are well connected through whatsapp groups, calls and electronic mail communication. Apart from notification and updates, these channels also serve as information dissemination medium for various subjects and matters. The board members attending the meeting are paid an honorarium of Rs 2500 along with travel reimbursement (and stay options whenever required). This serves as an incentive for motivating the members for active participation. The following figure 1 shows the organisational structure of the consortium.

The management body comprises of CEO, five dedicated staff and two running field officers (present at regional locations acting as warehouse assistants). The staffs come from relevant background and with years of experiences. There is a finance committee, supply chain committee and purchase committee which are active throughout the year and there are special project team based on the focused commodity in transaction. As the consortium had been in the journey of ‘trial and error’ experiences it didn’t involve any performance assessment. Initially they had an advisory board comprising of expertises but it couldn’t coordinate along with the decision-making body.

The business plan of the consortium covers a diversified list of commodity including: Kalachanna, moong dal chilkha, groundnut oil, pomegranate, mango, ragi atta, bajra atta, chana dal, green moong, cumin, urad dal atta. Makai atta, jowar atta etc. But with its limited capacity and constraints it has a small list of focused commodities including groundnut (prime commodity), tur, cumin and mango.

Figure 2 Organisational structure of GUJPRO



With its journey till now, GUJPRO has developed a strong partner networking. It has communications established with network players and agencies like NABARD, SFAC, NAFPO, Agricultural Department officials of Gujarat and other key players from the ecosystem. The CEO gets invited to various event or dialogue regarding FPC at various organisations. And it has its literature (though limited) present in the public domain, thus being in the forefront. GUJPRO had been awarded the prestigious 'Agribusiness Excellence Award 2017-18' for quality and assurance of farm products.

4.2 Value Chain Model

For the initial two to three years the consortium was involved in pilot activities and gradually got engaged in business activities in recent years. The institution had started with many activities (involving multiple commodities) but based on experiences moved towards commodity specific value chain approach.

The consortium functions on two principle: commitment and demand-driven policies. It strongly believes in developing business spirit and entrepreneurship skills in its value chain participants. It has observed that the member FPCs which have strong relationship with its member farmers have been more active in the transactions and coordinated well with consortium. The consortium believes that if the individual participants are capable enough to handle the transactions then the overall functioning of the institution improves. And it installs confidence to take more risks and enter into other activities and markets.

The federation works in focus areas of agriculture and horticulture and has gained expertise in:

- Procurement and processing of groundnut
- Procurement of oilseeds and pulses under MSP scheme (2016-17, 2017-18 and 2018-19)
- Commodity trading in cumin crop
- Marketing linkages and support to mango producers (local market set up and international exports)
- Production and supply of Fair Trade peanuts

The individual FPCs have entered into value chain activities of processed items and the consortium acts as a facilitator in such cases. The FPCs have been permitted to market on their own in case they have explored better prices. Following are the list of certain collective activities facilitated through consortium:

Collective Peanut Trade Partnership: this involves farm-gate procurement along with primary processing of peanuts at regional level (by the member FPCs). This is a project between GUJPRO and VNKC Agrocom Pvt. Ltd. for peanut value chain integration from sowing to ready-to-eat product. The farmer leaders and Board of Directors of FPOs from 10 blocks of Gujarat were taken for exposure visits to the Peanut processing plant at Dholka Ahmedabad (during July-October 2019).

Kesar Mango Mahotsav: This is a farmer market organised by GUJPRO and Gir Krushivasant Producer Company Limited in Ahmedabad. This served as a platform for B2C business as farmers could sell their mango produce directly to the consumers. The consortium helped in getting stall spaces for its farmer members and facilitated the business. There have been nearly 25 farmers who have benefited through this transaction and looking at the result the consortium has planned to repeat it.

Broker channels have been effective many a times and the consortium believes in integrating them in to the value chain activity. For example in the transaction of mango export the consortium faced losses due to rejection of its material on quality standards. The consortium took help of its broker partners to sell the produce (with fewer margins).

MSP procurement: for groundnut, tur, channa and mustard. The future plan is to also include onion. It has been a mixed bag experience for the federation. The federation has been involved in for over three years and the operations are quite seasonal.

- 18-20 member FPCs have been involved in bulk quantities procurement.
- Procurement centre at FPC site where commodity is grown.
- MoU were signed with state government and member FPCs
- Benefits: price recovery to farmers due to collective bargaining, improved membership, improved balance sheet.

In the MSP procurement the consortium earned Rs 40 crore, Rs. 150 crore and Rs. 80 crore respectively in its initial three transactions. This denotes the fluctuation in the revenue generated on a fixed value chain activity. The consortium thus has plans to indulge into more diversified revenue activities. The

Consumer business centre: GUJPRO has recently opened a retail outlet in Bopal (Ahmedabad) near its office vicinity, which includes:

- Commodities from SHGs, member FPCs (Chota Udaipur, Mandavi, Vasanda) and other players from various regions.
- Multiple brands present right now and will feed customers in the local vicinity. The centre has started with a small and sorted list of commodities (processed and packed)
- Plan to cumulate all or certain commodities under one specific brand of GUJPRO.
- Plan to open such centres all over Gujarat (in urban and rural format)

Commodity specific federation under GUJPRO: The governing body has decided to form its member FPC named ‘Banas FPCL” as the cumin commodity federation. The selected FPC would be working along with other member FPCs who are proactive in the produce of cumin crop. And the federation would handle the processing, storage and marketing (largely in local and regional markets). The GUJPRO consortium would work towards business facilitation at a much larger level. This is proposed plan by the consortium and work would commence in the nearby future time.

Apart from the above highlighted activities, GUJPRO has helped in display of the products of its member institutions at the Agri Asia Gujarat, the largest Agriculture Technology Exhibition & Conference on agriculture in India (2018).

It has also facilitated one member FPC for FairTrade program and based on good experience has plans to expand it. The members FPCs which reached a turn-over of over six crore business with Fairtrade International participated in a Fairtrade awareness training programme facilitated by CSPC Coastal Salinity Prevention Cell.

It had submitted a joint proposal along with Sattvik Ecological Organisation to the World Spice Organisation and Horticulture department of Gujarat State. Its plan is to build and connect network players in the field of spices and reap benefits by up-scaling the markets.

4.3 Compliance

- The consortium has a dedicated resource for handling its compliance issues in various cases. For the member FPCs it expects them to handle their compliance in their capability and the consortium helps the FPCs who are involved in an active transaction.
- There are issues of delayed payments to member FPCs which is handled by the consortium but due to manpower shortage the allocation efficiency is not good. For example in case of MSP procurement of groundnut the FPC had to shell out Rs. 20 lakh from its pocket to the participants. This adds unnecessary burden on the institution.
- Even the consortium has faced issues of delayed commission payment which is needed to further refuel their operations. This has hampered the institutions functioning a lot.

4.4 Capital

- It has its own challenge of working capital which is required for its expenses and covering losses during transaction.
- It has struggled to gain term loan capital for expanding its infrastructure.
- Rented office (registered under the address of DSC): it has basic essential services and space for conducting conferences and meetings.
- Rented shop (custom services centre): recently opened; have deployed a manager and a staff member to handle the business
- One rented warehouse for stocking groundnut produce.
- It hasn't been able to expand or experiment into other diversified activities and the primary concern has been of capital. For example it wants to get into hedging and marketing of residue free cumin but the sample testing is quite expensive.
- It doesn't provide with any actual credit services to its members. Nor does it offer any financial services to its members. Its only role has been to link the FPCs with players who have strong linkages with finances.

4.5 Capacity Building

- The consortium has tried helping out the defunct FPCs but then it has its own sets of constraints and limited capacities.
- Technical support to FPCs; training given on sites to farmers (regarding primary processing) but limited to the activities involving consortium
- Staff members have been part of few training programs but they are expensive. No strong coordination with third parties for extension services at an affordable packages
- Decentralized governance is there but with shortage of manpower, it is the MD who has to take most of the burden. The focus now shifts towards handling operations rather than giving more time advocacy and business development.
- There is need of efficient management body at the FPC level which would help in coordinating the activities.

4.6 Coordination

- Networking among consortiums/federation across India is very minimal and no transaction has been done.
- It is the member FPCs that largely arrange for their transportation services. With issues arriving in this it completely depends on the consortium. This leads to further reallocation of resources and either there is issue of underutilisation (for specific important tasks otherwise) or to overutilization.
- It only uses tally software for accounting and there are no tie-ups along with tech partners or other service providers to help in pre-harvesting, harvesting and post-harvesting stages. Except MBFCFPCL none of the consortium have got into linkages with established agri-tech players.
- The consortium has the ability to develop market linkages along with large buyers/processors but there are limited value chain actors who want to work on facilitative terms. Plus it has strong challenges from existing local and regional market players.
- Coordination is missing along with all actors present at different stages of value chain. For example it hasn't experimented with input suppliers to help FPCs largely involved in agri-input trading.

4.7 Conclusion

- Focus on creating a large membership base has shifted the focus from business development activities.
- Initial FPO Federations promoted had a larger mandate covering multiple agendas and commodities.
- At later stages the federations have not been involved in secondary and tertiary processing activities as there is constraint of capital for infrastructure and volume to be produced
- Limited skilled human resources and knowhow about new entries.
- The active participants and board members have realised the important of consortium at various levels but there is absence of sustainable long term business which would keep the revenue flowing.

- Withdrawal of promoting institutions from the individual FPCs largely led to poor performing ability of many FPCs. The issues of leadership development and ownership have led to dependency on federation now and this has hampered the overall functioning and efficiency. This has been the case across the consortiums.
- More dependence on MSP procurements and government projects to serve the expectations of a large number of member FPOs and build up the financial capital. This has been observed with difference in revenue generated and with payment issues.
- Commodity trading doesn't have huge margins and the revenue is fluctuating. The consortium tries to save on logistics.
- Active transaction at a time is active only with nearly 15-20 of the members and majority of them are part of the MSP procurement. Certain members have been defunct or dormant in the following years. All consortium had only involvement of 40-50% of its members with exception of UKSFPCL and Devnandini where the percentage is even lesser than 20%.
- Business with limited number of member FPCs leads to problem in fulfilling the commitment of supply. For example in the transaction of 200T of peanut the consortium had to buy produce from outside and then complete its transactions.

5 Maha Farmers Producer Company Limited (MAHAFPC)

5.1 Organisation Structure and Governance

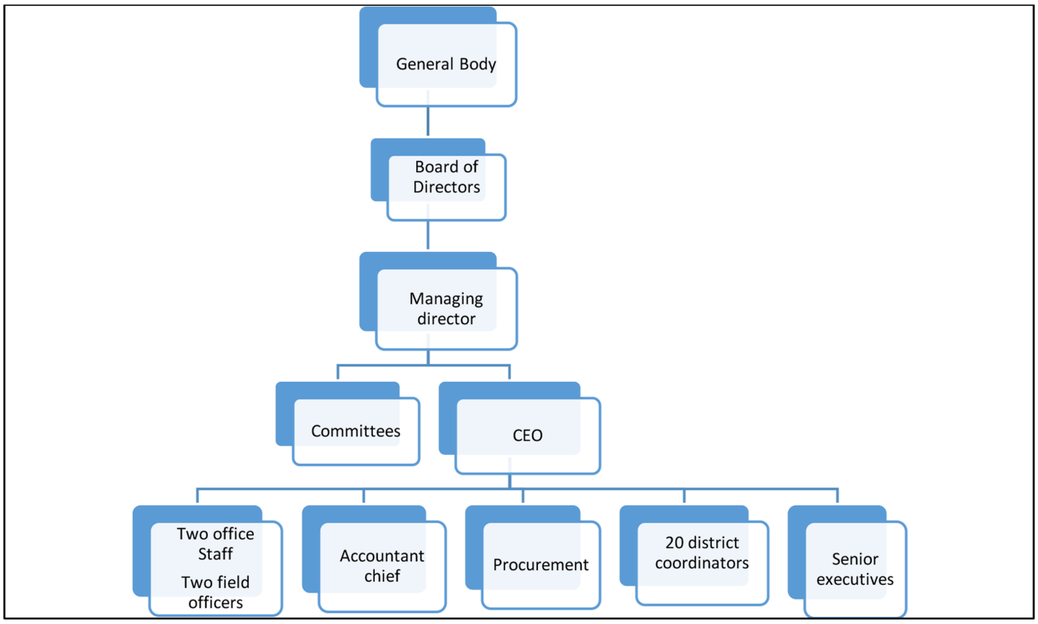
MahaFPC is a consortium of FPCs in the state of Maharashtra. It was formed in 2014 under the Companies Act and is listed along with SFAC. It has worked as a business facilitator in providing backward and forward linkages to its member FPCs. Its effort has been towards also establishing alternatives to traditional market routes for the produce of its members. It has been recognized as the state level agency (2019) of Maharashtra State government. Under which it handles procurement of pulses and oilseeds and also facilitates MSP procurement operations. And it involves its large membership base in the collective transactions. Maharashtra State has already an established cooperative federations taking part in procurement on behalf of government. The policies and legislation have acted as an enabling environment for the consortium to place itself at state level.

It has its office located in NAFED building in Pune market yard. This becomes a strategic location as Pune Mandi is one of the biggest APMC markets of Maharashtra. In 2014 it started with 25 members and reached to 302 member FPCs in 2020 with a farmer outreach of over one lakh producers. In 2015 it started its initial operations along with SFAC under its pulse procurement scheme. As of now, it has 149 collection/procurement centres in 23 districts. The consortium helped the member FPCs with establishment of primary processing machines under the MACP project of Maharashtra state government. There are nearly fifty member FPCs who have reached mature stage and have scaled in the value chain activities. The FPCs in vicinity of these mature FPCs are also actively engaged with the consortium activities. The annual AGM comprises of nearly 100 to 120 member FPCs attending it.

The consortium has 11 BoDs but body is functioning with only nine BoDs. The consortium follows a strict election process (through nomination and hand-raising for votes) for appointment of board. The BoDs are quite active and represent relatively mature FPCs and come with experience in value chain activities. It has been formed from bottom-up conceptualisation and collectivisation of FPCs. The consortium has a management staff consisting of Managing director (who is also the chairman), CEO, three full time staff and two field officers (who are present in the regional offices present in Vidharbha region). There are four different committees, namely: finance, audit, advisory and documentation.

The MD is primarily active in liasoning, relation set up, advocacy and business development. The CEO is completely engaged in daily reports and monitoring (pre-defined tasks). The operations are centrally handled by MahaFPC. The CEO is well connected with member FPCs through whatsapp group (separate for different transactions), calls and email. This has also developed the communication skills of consortium and FPC board members. The communication channels also helps in sharing relevant information, notifications etc in all supporting languages (English, Marathi and Hindi). For carrying out its operation in coordination with FPCs, the consortium has identified 20 district coordinators who are basically board members of FPCs. They serve as the point of contact in various cases. The management body also conducts on-ground meetings along with this representative and further information is disseminated.

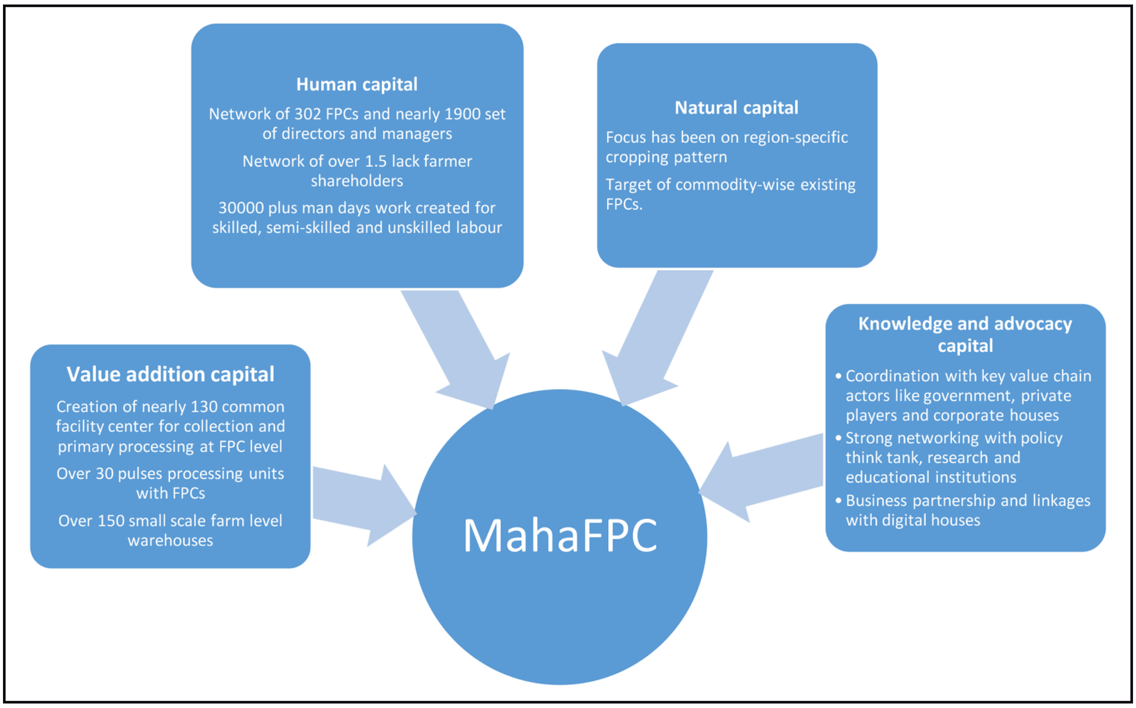
Figure 3 Organisational structure of MahaFPC



It invites experts from various backgrounds for advisory and guidance to its board members and other participants of the meeting. The consortium has stayed away from internal operations of non-participating member FPCs. For capital access it has linked 25 member FPCs with NABKISAN and helps them out in certain compliances. It has given letter of comfort for the respective

FPCs. It has helped the FPCs in efficient utilisation of the capital in its business plans. It conducts training whenever required along with meetings for resolving grievances on various matters. It has also setup management body for certain FPCs. The member FPCs are also connected for specific training programs of seed, fertiliser, NEML training etc.

Figure 4 Capital gain through work of MahaFPC



As it has established itself in the market and been recognized at various platforms, it has already witnessed in rise in its membership base. For filtering the efficient and poor performing FPCs it has set eligibility conditions of: a) 100 members on ROC, b) two years of formation, apart from parameters of balance sheet, performance, infrastructure, and presence of any active member FPC in its vicinity etc. It doesn't involve the new members in direct procurement for over six months unless it has the capability.

The federation helps the member FPCs in coordinating during procurement operations through its main office and regional offices. It records the common usages of inventory like bags etc.

With strong leadership, active participation, good coordination and linkages and effective governance, the federation has been recognised as a state level agency on the lines of existing market players. And thus has attracted more members towards it thus adding more pressure on the organisation due to shortage in manpower and increasing compliances. But with initial years of experimentation and learning, it has planned to expand gradually. It has established itself as a business facilitator with major emphasis on forward linkages.

Looking at the work done by MahaFPC under PSF onion procurement and other track record it was recognised as the state level agency (SLA) by Maharashtra government. As SLA it has led procurement of pulses and oilseeds under the price support scheme (PSS). The SLA status has brought the consortium in the ranks of 'The Maharashtra State Cooperative Marketing Federation' (70 year old apex institution of cooperatives) and Vidharbha Cooperative Marketing Federation.

The consortium has streamlined the work of FPCs participating in its transactions and strengthened the FPCs position in the supply chain handling activities. It has strongly followed and advocated 'commodity specific value chain development' approach in its business models. This has helped in building capacity of the participating FPCs through hands on training during active transactions. It has constantly worked towards developing commodity centric clusters of FPC with common business models for value addition through markets at farm gate level. Its focused commodities consist of onion, soybean, maize, tur and gram.

5.2 Value Chain Model

MahaFPC business models can be categorised into three types:

- Government business through PSS/PSF procurement operations
- Corporate business through supply of raw material
- Retail business through consumer durables (this is still in pilot stages)

Its major business areas over the years include:

- Procurement of pulses, oilseeds and onion under PSS/PSF schemes of GOI
- Interstate trade of onion
- State level dealer and distributor of fertilizers
- Consumer marketing of NAFED tea
- Onion storage and marketing infrastructure under MahaOnion project
- Future trading

With its established market activities, the consortium manages to keep its market relations intact even in case of low procurement (due to crop damage/ loss). In case of poor participation and members failing from commitment the consortium strictly follows levying penalty charges to them (the charges are minimal but a necessary evil). The entire procurement process is based on ERP system and payment is purely online.

Commodity value chain activity in onion

Since Maharashtra observes a huge production of quality onions and has been a dominant market player in this commodity, this became the primary focused commodity for the consortium. MahaFPC has continuously focused on onion commodity and established itself in the value chain.

Table 3 Onion commodity procurement

Year	PSF procurement		Interstate/Retail Trade		Total	
	Quantity (MT)	Value (Rs. Lakhs)	Quantity (MT)	Value (Rs. Lakhs)	Quantity (MT)	Value (Rs. Lakhs)
2018-19	5261.31	681.087	2405.05	193.956	7666.34	875.043
2019-20	25000					

Source: Annual reports MahaFPC

The consortium coordinated with 18 FPCs (from 05-06 districts) for the procurement in financial year 2018-19. This was more on a pilot basis. As infrastructure in the form of small scale warehouses were brought up at FPC level (with the support from consortium), the procurement was up-scaled at 25000 MT of onion from more number of FPCs. The FPC is solely involved in storing its aggregated produce at WDRA listed warehouses. The consortium coordinates in the compliance and payment delivery. The FPCs have to arrange their own transport services. Many issues of examining at various clearance points has been easily handled due to state recognized player like the consortium. This resulted in fetching better price outcomes to the institution and to its members and also strengthening the value chain activity.

Interstate Trade of onion

With the experiences of handling large scale procurement operations of government and its agencies under onion commodity, the consortium also went ahead with export of its onions across country. As per table 3 above, the FPCs were able to aggregate a total of 2405 T of onions in the financial year of 2018-19.

The FPCs at their warehouse carried out primary processing of the commodity at their storage houses including cleaning and grading operations. The consortium facilitated the marketing to southern part of India namely: markets of Chennai, Bangalore and Kerala, where the commodity is in huge demand. The consortium supplies the participating FPCs with gunny bags for packing. It has also coordinated along with the participants for logistics arrangement and issues. The consortium had signed MoU with Kerala State Horticultural Products Development Corporation (HORTICORP) for supply of onion and pulses to Kerala state. It has done one transaction of 5000 T of onion to the state. This transaction is quite beneficial for the consortium as Kerala state has no concept of APMC in practice. Therefore with coordination with government agencies it can establish itself in the market. But this value chain activity has been hampered with challenges of capability (manpower) and capital (building warehouses in Kerala).

In another consignment with NAFED, the consortium involved 39 member FPCs in onion procurement. A large portion of the procurement reached Delhi market and channelised through Mother Dairy's fruit and vegetable outlets 'Safal'.

Joint venture between MahaFPC and NAFED: with its repetitive large scale transaction the consortium has been able to strengthen its partner networking. This has also helped in branding the institution. Following this NAFED partnered along with MahaFPC to form a joint venture known as 'MahaOnion' for a period of 15 years. The joint venture will focus on onion-commodity. Following are the salient features of it:

- It is an unique initiative in the FPC ecosystem through public-private partnership model
- Its main objective is to develop strategic business for FPC dealing in onions through building storage facilities and marketing infrastructure.
- The infrastructure setup for the participants will be jointly funded by NAFED, MahaFPC and its member FPCs and Maharashtra State government.

It has come into a tripartite agreement along with 25 member FPCs (and NAFED) involved in onion produce and is currently building 25000 T storage houses for onion at cluster level, which would be ready by mid 2020. At cluster level each participant have given around 1-1.5 acre of land for 1000 T capacity. For the infrastructure building the individual clusters have covered 20% of the investment (Rs. 1 crore fund from FPC with around 100 farmers in each FPC), 25% from NAFED, 5% from consortium and the remaining funds from the state government under the RKVY scheme.

In the future the consortium wants to scale into the value chain activity of export of onions (to other countries) and enter into wholesaling/retailing of onion in urban spheres. For this the consortium will connect with 150 member FPCs and procure around one lakh T of onion by 2022

Commodity value chain of pulses: The consortium has been involved in the procurement of pulses under the price support scheme (PSS)/price stabilisation fund (PSF) involving its member FPCs. It has gained experiences in the facilitation of supply operations of moong, urad, gram and tur commodities.

In the year financial year 2019-2020, the consortium involved 94 member FPCs largely from regions of Vidharbha and Marathwada (combined total of 18 districts), under the PSS program of urad (10700 T) and moong (9000 T) procurement. The FPCs involved did primary processing of cleaning and grading and gave preference to its members under the fair average quality. The payment was done directly to the member FPCs bank account. The FPC and its members have received better income benefits (as the difference is huge between the market prices and the MSP). And since the procurement happens at farm gate levels, the FPC saves on transportation costs.

Under the current operations (February-March 2020) of procurement of tur as sub-agent of NAFED, the consortium has already procured 11003.9 T from 13,975 farmers (total target is between 65000-70000 T). The members are being advised to be part of these operations as tur is a major commodity cultivated by the FPCs of MahaFPC (in 17 districts). Nearly 50% of the 129 participants have capacity for storage and remaining have small scale warehouses. The consortium has already set up total of 122 collection centres out of which 118 are active.

Commodity value chain of soyabean: In case of soyabean commodity, the consortium had procured around 638 T of soybean produce fetching it a value of Rs 2.27 crore approximately in 2018-19. The consortium acted as a facilitator in supplying the procured commodity to corporate houses (as market prices were higher than MSP) and received service charge of Rs. 50-60 per tonne (from the corporate and not from member FPCs). It has been recognised as a vendor with solvent extraction plants (ADM, Latur) and facilitates purchase orders and efficient delivery chain. It ha entered into an MoU along with ADM for period of three years. The consortium has deployed its one staff on field to handle these particular operations. Seeing the profits it engaged into another transaction in 2019 season (December). The consortium has focused on procurement from regions which have rich experience in the specific commodity. And has plans to procure around 800 MT of produce.

The proposed target was of one lakh MT from ADM but there wasn't enough participation from the member FPCs.

The consortium is in direct competition with traders in APMC since they are also suppliers to the solvent extraction plants. The price discovery done on daily basis is shared with the member FPCs. The contract is signed based on consent of FPCs, post which the commodity is delivered within seven days. The participating FPCs receive their payment three days after the delivery of the commodity.

The FPCs involved are largely from Vidharbha and Marathawada region of Maharashtra state. The repetitive transaction of procurement has helped the farmers from the distress region of Vidharbha and Marathwada, where the consortium has a larger presence in terms of operations and active participation from members. The decentralised approach thus ensured that not only farmers in relatively better performing state benefited from the MSP operations, but also ensured coverage of otherwise marginalized districts.

Wholesale and retail business: The consortium has been recognized as the state level dealer and distributor of IFFCO which is country's largest cooperative fertiliser manufacturer. The member FPCs (around seven to eight) involved in agri-input trading have largely benefited out of this. Their issues of compliance in supply availability and on-time delivery have been eased out. In 2018-19 it supplied around 2064 bags of fertilisers at roughly Rs. 920 per bag. This ensured availability of affordable supply of fertilisers accessible to the FPC input store. But there were dependency built in case of compliance like license renewal or opening of input centre and even delay in payments from FPCs. For which the consortium has not been that active in this operation.

MahaFPC has also been recognised as state level dealer and distributor of NAFED tea packed product. It networks along with its member FPCs for marketing of the product in their respective regions. The FPC buy one kg packet at Rs. 215 (market price is higher) and sell it for Rs. 240 thus giving a margin of Rs. 25 to the members. The distribution site for the product is present in the vicinity of MahaFPC office area in Pune. Therefore the operation is handled with much ease but it has not been scaled yet.

B2B transaction with private buyers: the consortium has also been involved with players like Bigbazaar, Bigbasket, Grofers etc in supply of onion produce. There were issues of quality rejection, payment issues and low supply in such transactions. This resulted in no further scaling up of the operations. It has also been involved in supply of onion to players like Waycool (worked along with Sammunnati in this).

Future trading: In 2017, the consortium registered itself as sub-broker along with Prithvi Broker as the primary broker on NCDEX platform. It registered its 100 member FPCs on the platforms. It also took training from NCDEX and disseminated the same to its member FPCs. It was involved only in one transaction of maize (40MT) along with four member FPCs using NCDEX platform. It also went for risk hedging in soyabean and turmeric (Basmat). The experience in the pilot sort of transaction didn’t encourage the consortium to engage further with greater volume and other commodities. There are issues of storage, quality rejection, payment issues and technical compliances.

Box 1 Devnandini MahaFPO Federation

Devnandini MahaFPO federation formed in 2015 is a not-for profit organisation with primary objectives of trade facilitations, market linkages, trainings and advocacy. It is registered under section 8 of Companies Act. It is based out of Pune (Maharashtra) and has players (who are the BoD also) involved from various backgrounds and with loads of experiences. The board directors and the key players behind the federation have good coordination along with multiple value chain actors. It has a one-time payment membership for FPCs to avail its consultancy services. There are training programs on various themes conducted by the federation which is open for all. It conducts awareness drives through social media platforms. It is also involved in information and knowledge sharing on market, finance, inputs, extension services etc.

Devnandini Federation has a total of 680 member FPCs out of which nearly 100 members are part of the farmers market organised through the federation (in Pune and Mumbai). The member FPCs (who are relatively established) has been involved in various other such buyer-seller meets. The federation provides consultation to FPCs on business plans and does profiling of the FPCs. The federation generates revenue from its membership fees, training programs and certain commission on linkages.

The model adopted by the federation has been more beneficial to FPCs which are in a relative established state (with efficient business plans). Therefore it hasn't been able to reach till a larger number of its membership base since its inception.

5.3 Compliance

- Under the large scale procurement operations of PSS/PSF and MSP scheme, payment delivery to the member FPCs had experienced issues. This was amplified due to manpower shortage at consortium level and inexperience of FPC representative with technical knowledge.
- Payment is delayed but assured in transaction with institutional buyers but in case of private players there are multiple issues.

5.4 Capital

- Need large loans for getting into diversified value chain activities. Since current transaction is in procurement and supply chain the capital requirement is met. For example it needs more money for gunny bags procurement.
- Not yet accessed equity matching grant of SFAC
- Bad experiences of member FPCs who have availed capital from NBFCs. The consortium has not been involved in this.
- But since there have been many defaults the consortium has not further led into linking FPCs to NABKISAN.
- Poor financial profile and creditworthiness of member FPCs has impact on the overall profile of consortium. It creates blockages in accessing loans from various formal lending institutions.

5.5 Capacity Building

- It has developed a large membership base but has shortage of resources which is making the management difficult. Operation handling and compliance has been more complex.
- Need of one operator and two staff at each procurement centre. The FPC need to handle the working expenses.
- Scaling up current activities has been an issue due to limited capacity and other constraints.
- Need of expert directors on board.
- With procurement centre present (along with primary processing machines and transportation services) at FPC site, they have to travel less for delivery. This needs to be scaled to other member FPCs also that lack such infrastructure.
- Staffs have left from the organisation thus adding pressure on the management. This has been the case with other consortiums also.

5.6 Coordination

- Has developed good coordination with digital houses thus promoting its work and its success stories. This is not the case in other context.
- Only MahaFPC, GUJPRO and MBCFPCL have been recognized as state level agency but even they have their own good and bad learning and experiences.
- Social cohesiveness is at stake in case of non-participants for a longer period.
- MAHAFPC was effective in coordinating national organizations such as Small Farmers' Agri Business Consortium (SFAC) and establish linkages with the departments of the state and central governments. This is missing in other cases.
- With large membership base and further increasing it becomes difficult to bring all the members in active participation of its limited set of activities.

5.7 Conclusion

- Large stock with government agencies and subdued demand has ruled out any chances of price rise in the wholesale markets.
- Prices of vegetables are lower and the disposable incomes of people have gone down. For example: There was little demand in the market for tur thus the price fetched was quite less than expected.
- It faces stiff competition from neighbouring states which are the leading producers of certain commodities in which the consortium is actively transacting.
- For farmers and FPCs to get transformed to market orientation for better price outcome, developing a corporate governance kind of structure takes time and is filled with various challenges.

6 Utkal Krushak Samanwaya FPCL

The Sahabhagi Vikash Abhiyan (SVA) along with NABARD floated a federation known as Utkal Krushak Samanwaya FPCL (UKSFPCL) in 2017. SVA was selected as Producer Organisation Promoting Institution by NABARD and so far has already promoted around 41 FPCs (14 new members have also joined) in the state of Odisha. Prior to this SVA had already promoted a FPC named Odisha Producer Company Limited (OPCL) in the year 2011-12, and has been integral in promoting and facilitating other FPCs. SVA has played key role in capacity building and hand holding support in business activities of the member FPC of UKSFPCL and also OPCL.

Sahabhagi Vikash Abhiyan (SVA)

SVA was formed in the year 1993-94 as a collective of individual producers and community based organisations. It is registered under Society Act of 1860 and Foreign Contribution Regulation Act 2000. It started with development activities for its members who are largely SMHF and underserved sections of the agriculture community of Odisha state. It has received grants from various sources including, SWISS AID, NABARD, ITC, ICRISAT, VRUTI, Govt of Odisha etc out of which the largest allocation has been towards livelihood promotion.

Its major activities has been towards sustainable agriculture, promotion of FPOs, promotion of multiple cropping pattern, millets cultivation, WADI (TDF) project, micro-watershed development, fluorosis mitigation program, rights of forest dwellers, promotion of agro industries, Gram Swaraj Abhiyan and also into technology, training and resource centres.

Presence of SVA is in majority of the districts in the state. Its main office is located in Bhubaneswar and it has total six regional offices (primarily in Western Odisha). Since SVA has a diversified list of activities it has marked its presence and significant work on ground and has led to impactful participatory development campaign.

SVA has been pioneer in community based natural resource management. It has led the advocacy, campaign and public education activities along with training and capacity building programs. With the strong presence of SVA in agriculture ecosystem it becomes a suitable partner to facilitate the FPC ecosystem in Odisha.

6.1 Organisation Structure and Governance

The management of the federation is directly handled by staff of SVA. The federation has 41 member FPCs present in 23 districts out of total 30 districts in Odisha. Out of these there are around 27-28 member FPCs who are in relatively active state who are involved in processing and marketing activities. The federation focus is largely towards marketing linkages but due to presence of largely nascent FPCs, the overall organisational functioning has not been formalised yet. Instead OPCL has been formalised and worked towards including as many member FPCs of UKSPCL in its value chain activities. The work of OPCL has been indirectly of a federation or consortium.

For capital access, SVA linked its promoted FPCs with NABKISAN and various other banks. It identified FPCs which were capable enough and had viable business plans. In the quarterly meetings along with the board members there is strong emphasis laid on developing business plan as per the demands. SVA has conducted meetings of the FPCs along with various value chain actors involved in the transactions.

Through its fellowship program at SVA, there are youth graduates and post graduates (from agri-business management and other relevant fields) from prestigious institute who have been collaborated with functionaries of member FPCs. This has given a knowledge support, expertise addition and different perspective to the overall functioning of the FPCs.

- The promoting institution being a NGO doesn't have its expertise in business operations (business culture). It has been able to only establish linkages through its network partnering.
- Traditional players active at regional level buy produce in any form (price differences based on quality set by buyer) and pay instantly in cash and procure from the farmer's field. This acts as in disincentive for member FPCs to participate in collective activities of federation.
- With constant involvement of the PI, there are chances of building of dependency in the longer run resulting in ownership issues
- SVA launched a campaign through its FPOs to promote multiple cropping patterns which consists of pulses, maize, spices, oil seeds and agro forestry products. SVA as a promoting institution has been actively involved in the framing of the federation. But the weak coordination

along with the member FPCs (as it has been formed by NABARD) in the federation has led to communication gap and trust issues. There has been no viable business plan established yet. SVA wanted to work on a small set of FPCs under the federation formed but it was challenging as NABARD had requested for taking all the FPC formed under its ambit. SVA couldn't indulge much time and energy for the business facilitation of business activities through the federation. It already has a huge list of activities being monitored and developing the FPC ecosystem in the value chain would have needed separate focus and energy level.

6.2 Value Chain Model

- Provisions of high quality seeds and planting materials
- Regular period at reasonable rates

- Provision of technical support
- Knowledge sharing and information dissemination

- Linkages to industries and other market players
- Handling compliance issues

- OPCL over the period of nine years has established itself in maize marketing (supply to processors), organic products (supply to distributors in Chennai) and processed spices. With the effort of SVA, OPCL has also included few member FPCs of UKSFPCL on a pilot study. On advice and supervision of SVA, certain member FPCs have been working in value chain activities. This has developed confidence and trust among member FPCs involved. SVA has been also working towards promotion and awareness programs to bring in more members to action.
- It has involved two member FPCs (from two districts) in marketing of tamarind to Chennai in 2019. The market players were identified through connections of SVA. Further with SVA's help, OPCL and members of UKSFPCL have been involved in marketing of groundnut and vegetables but these transactions has been of low volume and not that frequent. The federation has been involved in setting up of

one vegetable outlet (near to SVA Bhubaneswar office) wherein raw produce from members are sold. Apart from this the federation hasn't been active in any other operations. It was due to effort and active participation of SVA, that the vegetable outlet project was floated.

- **Value chain activity in maize commodity:** OPCL and two other member FPCs of UKSFPCL have been involved in value chain activities of maize. The procured item (around 100 T) is supplied directly to Pashupati group which is one of the biggest processing plants in Odisha. The transportation services are outsourced from third parties and are coordinated by the federation. The market linkages have been created with the coordination of SVA. Initially the FPCs used to directly sell it to the local players at lower prices. Now there is at least increase in margin of 50 to 100 rupees per quintal.
- OPCL and UKSFPCL (through SVA) have developed the participants in weighing, quality control and other extension services related to maize. UKSFPCL through networking of SVA has initiated linkages with other players.
- The payment is channelized from processing plants to member FPCs to member farmers. There have been payment issues. In this case the member FPCs have agreed upon for a window of seven days for payback. But largely farmers are attracted with instant cash payment (even if the price fetched is less) therefore not many farmer members have been scaled up. It takes time for quality standardisation in order to supply produce to markets for better price outcomes. And coupled with delayed payments member farmers tend to sell off their produce in traditional markets and not participate in the long collectivisation approach.
- The federation has plans to setup drying plants at FPC sites for better quality products. With repeated transaction even under the supply of maize (without any value addition), the percentage of farmer members actively participating has increased. Nearly 40%-50% of member farmers (in total of three FPCs) got involved in the transaction along with Pashupati. They have switched from distress crops like cotton to maize to gain better outcomes.

- The federation with the help of SVA have sold seeds (on cash basis) to maize cultivating farmers. This helped in harvesting produce of quality standards required in the market thus facilitating the business with less compliance.
- **Value chain activity in organic products:** OPCL has been directly involved in marketing of organic products to distributors from Chennai which were linked through SVA. OPCL has also involved member FPCs of UKSFPCL in this transaction.
- The commodity listed under the organic products range from tamarind (three FPCs), groundnut (two FPCs), sesame oil (two FPCs) and khajur jaggery. The listed commodity has been demanded from the distributor's ends which have a good supply gap in the markets of Tamil Nadu.
- For tamarind commodity storage there is usage of cold storage unit from third party (which has been again linked through SVA). Since SVA is quite predominant in the Kalahandi region of Odisha it has helped in connecting the participating FPCs with processing plant player in the region thus adding value addition services. For making of khajur jaggery the member FPCs have been provided with training programs.
- The payment is done from the distributor to OPCL and further transferred to the member farmers. With the coordination of SVA, the distributor also gives advance payment before the procurement process. In certain transactions of tamarind SVA had to intervene as the buyer wasn't satisfied with the produce. Therefore SVA is involved in briefing the participants with the quality requirements of the buyer. SVA also deploys its field staff for quality check and other relevant extension services. Since this activity is only a year old, there are many grey areas to be filled.
- **Value chain activity in paddy:** with the coordination of SVA, one member FPC of UKSFPCL has been involved in supply of paddy produce to rice mill (total transaction of Rs. 60 lakh). But this has been limited to pilot works.
- **Value chain activity in spices:** From 2011, OPCL has been doing value chain activities in various processed spice products. It procures the raw material from its farmer members and rest from market. It has setup a processing plant of its own. After formation of UKSFPCL it has involved certain member FPCs.

- The commodity list comprises of chilli powder, turmeric powder, dhania powder, jeera powder, meat masala, garam masala etc. It is involved in the branding (brand name is ‘Swaraj’ and trademark is ‘Gram Swaraj’) and marketing of the packaged products. It does direct retail sales of its products in the local markets through sales staff of SVA.
- But this activity hasn’t been profitable over the period of time. There is need of resources, commitment and energy in conducting value addition services, branding and marketing to establish itself in the market areas which is already dominated by local players. There is absence of professional support to carry out activities.
- **Value chain activity in vegetables:** As functionaries of UKSFPCL, SVA has helped the member FPCs in setting up of vegetable retail outlet in the vicinity of its Bhubaneswar office. There are around 10 to 12 member FPCs who transport their vegetable produce (mainly brinjal, pumpkin, wild vegetables etc) to the urban centres of Bhubaneswar, Cuttack and Rourkela. Primary processing of cleaning and grading is done at the FPC field site. This has been a learning process for producers to enter into business entities.
- Apart from the above listed value chain activity, SVA has also linked the member FPCs of UKSFPCL with private players for sale of solar lights. This helped the FPCs in fetching some income from the activity. The member FPCs have been registered on E-commerce platform known as ‘kalgudi’. This platform brings agriculture producers in coordination with agri-tech start ups. This is a very new intervention.
- To summarise, the federation being newly formed and comprising of new members in large numbers, it has to still undergo a journey of few mores to enter into the value chain activities.

6.3 Compliance

- As majority of the members are newly formed the focus of the federation and the promoting institution is shifted to handling compliances and the whole objective of establishing market linkages got weakened.
- The CA is not focused on the FPC deliverables either due to his commitment divided among various FPCs or he isn’t finding the revenue earned to be sustainable enough.

6.4 Capital

- The member FPCs (newly formed) are still getting grant support through NABARD but this has developed a dependency. This will be questioned as the project lapses.
- Investment returns in case of spice unit or any processing unit doesn't fetch price margin when compared to bulk procurement. There has to be strong market linkages developed if the entire value chain activities are handled by the federation.
- Value chain financing is absent in most of the cases. Except few instances none of the value chain activities has been linked with inter-actor financing.

6.5 Capacity Building

- The consortium has been overloaded with too many objectives to be fulfilled.
- The promoting institution based on its working principles and experiences wanted to work with a small set of FPCs initially but the federation was formed with more than 50 FPCs. Majority of the members are newly formed (not even more than three years in formation)
- Absence of professional support in carrying out activities requiring separate set of expertise and skills.
- Finding efficient and reliable CEO for managing the FPC business activity is complex as: a) local population is difficult to have the capability; b) People with capability are reluctant to shift their base to rural areas; c) FPC is not sustainable to cover the revenue expenditure of having an efficient management body.

6.6 Coordination

- Odisha state has already drafted FPO policy but it hasn't encapsulated local needs and characteristics in it.
- Poor coordination along with banks.
- There is not equal or balanced representation of member FPCs and member producers on the board. Most of the federation/consortium do not have representation of large number of member FPCs. There is hardly any representation of women on board of maximum players. This weakens the process of social capital building.

7 Tamil Nadu Consortium of FPCL

7.1 Organisation Structure and Governance

The TN Consortium of FPCL listed in SFAC was formed in the year 2015. It is recognized as the state level consortium of farmer producer companies in Tamil Nadu. At the time of field visit it had total of 35 FPCs as shareholders. Out of which nearly 14 are quite newly formed and few members are quite old and established in the value chain. Each shareholder has contributed Rs. 10000 each for 100 shares raising the equity base to Rs. 3.5 lakhs. There are nine BoDs on board which is reduced from initial 15 BoDs and the consortium plans to take it down to five BoDs in future. The current BoDs bring years of expertises and skill to the overall functioning of the consortium.

It started working with five FPCs. Later on FPCs became shareholders which were promoted under central and state government schemes and agencies (SFAC, NABARD, Coconut Board of TN, Department of agriculture etc). Member FPCs of the consortium are active in business operations and a good set of FPCs are involved in value addition services. They have effective business plan in execution which is also revised based on consultation from the advisory board and expertise of the consortium. The member FPCs are focussed in various commodities and have applied specific value chain activity for the commodities. They have been involved in branding and marketing of their respective products.

The active transactions started only after two years of its inception. The consortium is largely involved in the working areas of: resolving compliance, networking with other value chain players, developing business plans of member FPCs and developing market linkages. It gives paid services to its member FPCs (and even non members) along with capacity building and business planning. The consortium has partnered along with SBI bank to give credit access at premium interest rate to the member FPCs. It facilitated seven member FPCs to equity matching grant of SFAC. It was registered with NITI Aayog (New Delhi) and is qualified for availing grant under schemes of central and state government.

In order to have active and established FPCs as its members the consortium has set its own criteria as follows:

- Membership base of 500
- Turnover of 50 lakh and more
- Presence of CEO and staff in the management body
- Maintenance of book records, minutes of meetings, business plans etc.

The consortium delivers its major functioning through one of its matured FPC (Erode FPCL). The FPC is nearly 12 years old and has established itself in the value chain. It carries out majority of the training programs and extension services. The consortium has certain member FPCs which have been selected as RIs by SFAC. These FPCs have promoted and facilitated other member FPCs of the consortium.

The consortium intervenes for resolving issues pertaining to board members of its member FPCs. With its vision of strengthening the member FPCs before entering into the market it has taken steps to enter into the internal operations of its member FPCs. The consortium maintains the dialogue and ensures coordination along with each and every member. It has a whatsapp group connecting CEOs of all the member FPCs and key directors where CEO is absent. It is also involved in hiring and training (in office management and administration) of CEOs for its member FPCs. The consortium constantly conducts buyer-seller meeting involving market players and member FPCs. It has been part of various government consultations for developing guidelines of FPC ecosystem.

The consortium works toward developing corporate governance structure and practice. The management body performs management audit of member FPCs which contains a checklist of rating parameters. Based on the results, the FPCs with lower ratings are called for further training and discussions. Its primary objective is to transform the FPCs activities from production driven agriculture into market driven agriculture.

- For entering into diversified activities, the consortium needs to focus on price outcome enhancement and increasing and strengthening the clientele base. This has its own constraints and challenges.

- Member FPCs participating in active transactions of the business plan of consortium have suffered losses in cases of not following up the norms and practices set by the consortium.

- There are several challenges to further promote the retail outlet at all districts and to strengthen the network marketing.

- Visibility and awareness is not there for consortium/federations. There is overlap in roles of consortium and member institutions.
- Different business culture of member FPCs as they have been promoted by different players. This leads to problem of creating a strong shared vision.

7.2 Value Chain Model

The consortium has facilitated various value chain activities for its member FPCs. The member FPCs have shown active participation and strong coordination. With this the consortium has also focused on various pilot studies and future projects. For instance it has facilitated a MoA with M/s Shambavi Tech Farms Pvt Ltd and Subjiwala.com along with its two member FPCs. This will involve trading of potatoes and coconut between north and south regions. Few rounds of discussion and visits have been initiated and the trial work would commence in the nearby future.

Retail outlets (B2C business): The consortium plays the role of facilitator to bring its member FPCs to a common market platform. This has been one of the key collective activities of the consortium. It has simply facilitated the business, rest majority of the value chain activities is handled completely by the participants.

The consortium signed MoUs along with member FPCs to form network retail outlets known as 'Unnatham Uzhavar Angadi' (Farmer Supermarket). There are 12 such retail outlets spread across Tamil Nadu state with total of 15 member FPCs participating in it. Out of the 12 outlets, seven are in rural areas and five in urban areas. In the urban centres there is diversified list of packaged products based on the market research analysis. The retail outlet has staff deployed by the participating FPCs to handle the operations. The FPCs has developed skills for handling business activities in supply of processed food (largely ready to eat) to consumers.

Commodity pricing is handled by the FPCs. And the pricing and quality is based on the consumer choice in the market area. The consortium has proposed its logo for registering as trade mark under the 'Trade Mark Act of 1999'. After approval this will be embedded in hologram to maintain the unique identity of the products of the member FPCs (this will be used in all the transactions).

Value chain activity of banana and vegetable: The consortium has developed marketing linkages for one of its member FPC (Kazhani FPCL) in supply of banana and vegetables. The member FPC predominantly cultivates banana commodity (cumulatively grown over 300 acres) and vegetables (over 120 acres of cultivation). The procured produce is transported to 'Green yard' company situated in Bangalore and the transportation is arranged through the consortium. The management body of consortium also facilitates quality check of the produce before transporting. It charges from buyers and sellers for the quality check process.

The consortium earns 2% commission in the overall transaction.

One of the members FPC has six vegetable retail outlets and the consortium is working towards scaling total 60 outlets (on franchise basis) across three districts.

Seed processing plants: Under the SFAC scheme of seed processing units, around six member FPCs have been selected for grant of Rs. 60 lakhs for infrastructure and machinery set up. Erode FPCL has already prepared its unit and the consortium with its additional support has build meeting room, training halls and accommodations in the same complex.

Linkages with Special purpose vehicle: The consortium has established linkages with terminal market which is being developed by Department of AM&AB under PPP mode in an area of 60 acres at Sriperumbudur. A special purpose vehicle has been formed with four different companies (acting as hub) and other member FPCs (acting as spoke). This is a Rs. 150 crore project out of which Rs. 50 crore is subsidy to be used for buying 30 acre land. Main objective of the project is to utilise latest technology for trade facilities.

Buy back tie-up with market player: Ansio is a UK based online grocery shopping platform. It also has supermarket stores for delivery. It functions in Chennai city through network of six centres. It has a huge diversified list of packed and processed farm products which it delivers on orders. It has tied up with the consortium for entry into fresh vegetable supply (list of 26 products) and wants the procurement done from its member FPCs. The buyer has assured of giving separate shack for display and sale of FPC products in its super market stores. And every Sunday there would be one FPC to interact along with consumers. Ansio pleased with the track record of consortium has also them offer of coming on board and also develop a dedicated application for connecting FPCs to customers.

Other pilot studies and future projects:

- With the consultation of consortium, benefits of 'Mission on Sustainable Development of Agriculture', was obtained for two member FPCs and two more are in pipeline. In this project Rs. 10 lakh would be channelized by government for building processing units.
- The consortium received order of Rs. 6.34 lakhs for supply of new year gift pack from Directorate of AM&AB. The participating FPCs packed their products in this gifts.
- In 2018, Rudram Foundation (France based company) approached the consortium for buying produce from the member FPCs (to start with banana first). The consortium linked one member FPC dealing in banana and MoU was signed among the parties. But due to issues of rejection of produce in quality check, the consortium has request the buyer to have its branch in Tamil Nadu to conduct quality check at field site itself.
- Consortium has also conducted pilot work of 'Backyard Poultry Farming' and has coordinated certain member FPCs along with it. It will sell the produced egg at Rs 15 per piece and in the next stage will also sell chicken for breeding. It will also procure millet from its member FPCs and promote it as animal feed to other players in the local regions.
- Pilot work has also been done in supply of vegetable to Horticorp (Kerala State government SPV) through one member FPC.
- The consortium is involved in the project preparation of Tamil Nadu State government scheme of 'FPO trade centre' in Chennai where only FPCs would be allowed to trade. The tender has been passed and Rs. 100 crore has already been sanctioned by the state government.
- Payment gateway has been prepared on its website to mobilise orders for sale of FPC products. The transaction for online buying and selling would be commenced soon.
- Proposal was sent to Ministry of Agriculture to allot space at Azadpur Mandi for transaction of coconut at the initiative of member of Coconut Development Board.

Innovative initiatives:

- The consortium submitted a proposal to Ministry of Railways for allotment of space for establishing retail outlet for sale of products from FPCs at major railway stations.
- It has also submitted a proposal to GoI (in 2014) for introducing a refrigerated non-stop train between Agra and Salem for perishable items from five states from both North and South regions. And this assignment was approved and the central government appointed Container Corporation of India for its implementation.
- Proposal was sent to the district collector of Erode for allocation of display of FPC products at Poomaalai Complex which was earlier allotted to SHGs (but hasn't been used frequently)
- Consortium facilitated participation of member FPCs at World Food International Trade Fair (2017) at New Delhi. Total of 10 directors participated and displayed the products for trade. The logistics were arranged by TN state government.
- Consortium availed space for display of FPC products at Agri Index (2016, 2017 and 2018) at CODDISSIA and VIBRANT TN event. Around eight to ten FPCs participated and stall space were allotted free of cost.
- 'Eco-tourism' program planned by consortium for city people to have experience of rural stay.

7.3 Capital

- Need to scale up revenue sources in order to sustain the institution and its members.
- Avail grants from applied government (central and state) schemes and approved proposals.
- No specific policy support of funding provisions for consortiums/ federations
- Needs manpower to generate revenue through expansion of its paid services

7.4 Capacity Building

- Activities like quality check needs to be decentralised after a period. For consortium it becomes additional task and resources get divided.
- No specific policy support for capacity building of consortium/ federations (at state or centre level).
- Absence of risk mechanism which has led to low risk taking ability. This has been a key issue in building trust and confidence while taking up new activities.

7.5 Coordination

- Value chain activities have been scaled up but linkages with big players is missing.
- Coordination needed to strengthen social capital to mitigate the institutional risks (also horizontal risks)
- Member FPCs not part of retail outlet business need to participate along with active members.
- With change in leadership of member FPCs, the consortium has to reset its coordination process.
- As member FPCs have been formed by different organisations and agencies, it becomes difficult for the federation/consortium for brining all of them on common page (shared vision).

8 Madhya Bharat Consortium of FPCL

1.1 Organisation Structure and Governance

Madhya Bharat Consortium of Farmer Producers Company limited (MBCFPCL) is a state level consortium of FPCs in the state of Madhya Pradesh. It was promoted by SFAC and is a profit organisation registered in 2014 under the Companies Act (Producer Company under section 581A in Part IXA of the Company Act 1956, as referred to under section 456 of the Companies Act 2013). Its objective is to develop an umbrella support to member FPCs on market linkages, financial access, brand development, value addition services, extension services and enhanced income outcomes. In the year 2018 it was recognised as the state level agency by Madhya Pradesh state government. It has its main office in Bhopal along with regional offices in Dewas and Jabalpur. It has a membership base of 109 FPCs and 11 cooperatives. The consortium's presence is in 45 districts out of the total 49 districts in Madhya Pradesh. The farmer outreach in these districts is nearly 2.24 lakh.

Nearly 65-70 FPCs are actively engaged in the collective activities of consortium. And the active FPCs have CEO and staff to manage the business activities. Out of this the matured FPCs (in terms of lifespan here) have management and leaders who are reliable and gained experience. The consortium extends support to the member for MIS management and business management support & compliances. The consortium involved rural youth to work on part time in the management of other FPCs. The presence of active management body at member FPCs helped in coordination, monitoring and resolving issues.

2005-06	2009-10	2012-16	2016 onwards
• 13 FPCs • Divided into different grades • A grade: active and good growth; 09-10 FPCs • B grade: not that active • C grade: dormant or poor performing; absence of management staff	• 10 FPCs • Mixed profile in terms of performance • 06-07 FPCs are good • RI support and facilitation have a played a key role	• 50-60 FPCs • SFAC promoted • 50% are functioning • Support of RI and CEO	• 16-17 FPCs • NABARD promoted • Ongoing project • Low outreach • Low volume of business

The board member size was 11 comprising of one women representative. They are chairman or directors of different member FPCs. The directors form two committees of finance and procurement. The consortium follows rotation policy of changing 50% of its board members to have equal representation in the governing body. Certain directors have remained constant and new entries are done on a timely basis. Its principle is to have involvement and participation of as many member FPCs through the re-election. This helps in developing ownership among the participating institutions. There are at least four board meetings conducted at the office venue which increases based on the operations. The consortium ensures maximum attendance in the meetings. It has services of stay, food, honorarium (Rs. 500) etc to incentivise the visiting members for meetings. Senior experts are invited to the board meetings as observers and sharing their inputs and experiences.

The management strength is 11 with one CEO, marketing team; production and processing team; procurement team and finance and admin team. They coordinate along with board members of consortium and respective member FPCs. The BoDs and CEO of respective member FPCs are communicated and connected through mail, calls, whatsapp group, resource material etc. The CEO of the consortium is also part of many whatsapp groups comprising of major FPCs and key drivers in India. It is well updated with market information, policies, schemes etc. It has a separate group for dialogue building where all information about market is shared. In the initial stages the consortium conducted and facilitated many training programs for its member FPCs.

Its member FPCs were promoted mainly by ASA, DPIIP and NABARD. The consortium has an advisory committee mainly comprising of members from promoting institutions like ASA, Vrutti etc. But over the period of time as the promoting institutions got disintegrated, the committee is not that active and frequency of meetings has fallen down. The expert committee comprises of three retired bureaucrats from agriculture field.

1.2 Value Chain Model

MBCFPCL deals with crops namely: Wheat (including M.P Sharbati and Durum both), Gram (Kabuli, dollar & Kanta), Pigeon Pea, Lentil, Black Gram, Green Gram, Soybean (RTRS), Cotton (Including Better Cotton) & Maize (Yellow Bold) Poultry Preferred Maize, Rice (Organic and RCI), Small Millets (Kodo Kutki), Niger, Mustard, Linseed , Spices- Coriander, Chilli and turmeric , Vegetables – Onion, Garlic, Tomato and Ginger. In the timeframe of the study the operations were in focused commodities of wheat, maize, rice, tur, channa, moong and soyabean.

For financial linkages it has facilitated release of funds to its member FPCs under SFAC equity grant amounting to Rs. 70 lakh, and Rs. 300 lakh under SFAC credit guarantee scheme (for 5 FPCs). For infrastructure support it has facilitated sanction & release of Rs 324 Lakh- for 15 FPCs. This includes development of grading, processing, storage; marketing and farm machineries custom hire facilities under RKVY scheme. It is the business correspondence of NABKISAN wherein it gets 0.5% commission on proposal making and assessment of FPC (give letter of comfort). The consortium has availed loan from Sammunnati Finance, FWWB and IDBI Bank.

The table 2 below shows the business and financial growth parameters of the consortium. There has been a linear increase in the turnover over the years. As the consortium has taken up large scale operations it has also added member FPCs to its shareholder list. But profit earned has been non-linear and fluctuating. The SMHF producers gained Rs. 100-1500 per quintal and Rs. 1500-15000 per season. They benefited from the fair MSP operations facilitated by the consortium. Around 28 FPCs received total revenue of Rs. 1 crore and more and their growth increased between 0.75-5 percentages.

Table 2 Business and financial growth of MBCFPCL

Year	Particulars			
	Turnover (Rs. Crore)	Share capital (Rs. Lakh)	FPO members	Profit earned (Rs. Lakh)
2015-16	1.92	16.01	46	0.71
2016-17	7.93	47.34	86	5.35
2017-18	23.26	48.82	97	1.35
2018-19	154.55	49.61	109	1.93

Source: Annual report 2018-19 of MBCFPCL; responses from CEO

With advocacy role played by consortium (along with MAFED) the mandi cess for transaction of FPC produce was brought down from Rs. 3 per tonne to Rs. 1.5 per tonne. This benefited the 52 FPCs involved in mandi transactions. It also helped the FPCs in getting clarification on getting Mandi licenses. It facilitated the trade of non-perishable items outside the Mandi premises and in this the buyer covered the tax levied on the FPCs.

It partners with state of Telangana and Andhra Pradesh mainly for conducting exposure visits of the FPCs of the respective states to their organisation. It partnered with PwC for capacity building and technical extension services for its member FPCs (15 member participants). It came into an agreement (for a limited period) along with TCS for providing software solutions in crop advisory, weather etc. Over the period, it has developed a strong partner networking. It has worked through innovative supply chain model and with its involvement at different stages it has capitalize the social capital in its institutional setup.

For risk sharing it insures its produce stored at warehouses and designated places for theft and fire catching (Rs. 1 crore insurance). The quality check in most of the transaction is handled by the consortium. If it doesn't meet the requirements the consortium sells the produce in other channels through its linkages and connections. But the price outcome fetched is less in such transactions.

- Mixed experiences of consortiums in procurement and other operations along with government agencies. Some have suffered losses and faced compliance issues. But since government is a viable business partner which assures large scale activities the consortium have maintained their relations and continued further operations.
- Many business models dealing in certain commodities has not suited the FPCs and there hasn't been much activeness or risk taking ability observed. Market requirement didn't match with the regional characteristics.
- FPCs joining in large numbers with no experience in business activities or with no viable and efficient business plans.

8.1 Compliance

- Compliances require allocation of manpower resources and this is an ongoing issue for all the consortiums. It struggles to divide time and resources for even handling compliances of its active operations.

- The members dependent on constant hand holding support of RIs have not been able to engage in compliances after the support has been withdrawn. This was a big hurdle for consortium to involve members in active transactions as they didn't fulfil the compliances in various cases.

8.2 Capital

- Large scale infrastructure is needed at cluster level with advancement in mechanisation. As with small scale units at FPC level do not have efficient recovery rate.
- Poor equity and capital base, poor infrastructures related with storage and processing units at FPC and consortium levels.
- It is a complex challenge for consortium to make FPCs as revenue generating models as roles and responsibilities are still not defined. There is an overlap between the functionaries of FPC and consortium.
- Commitment is there but revenue base is still less. With more money it can revive the new or the defunct FPCs.
- Member FPCs and farmers are comfortable with online payment in government transactions otherwise they need cash in hand (which is provided by middle agents)
- Capital constraints have limited the basket of services to be provided to the members. This has affected the horizontal growth of the institution. And also certain officials have left the organisation.
- Creating commodity based federations within the consortium involves costs and expertise in institutional building.
- In the informal setup of activity based federation might have cost cutting in the institutional building.

8.3 Capacity building

- There are losses with transaction along with weak FPCs and the losses were incurred by the apex body.
- Federation/consortium has their own constraints and limited capability to handle so many members.

- Production operations have not been efficiently handled by the member FPCs. Member FPCs have to be strong at least in production stage which would help in the facilitation process of consortium.
- Leadership has dearth of women participation.
- Need of regional offices and field staff
- Operations become easier with FPCs having some important infrastructure like collection point, primary processing machines etc.
- The member FPCs have struggled to keep their member farmers constantly engaged in collective action. In case where the institutional has been organised the functioning has been more effective.

8.4 Coordination

- With limited manpower resource, the CEO and staff has to travel to field sites for handling operations on ground.
- Price exploration has been one of the key coordination issues leading to conflicts. For payment issues the farmer members of FPCs do coordinate along with consortium only if the collective action is repetitive in nature.
- Farmers have had high expectations from FPC but the participation in the collective action has been minimal. Same has been for FPCs who have high expectations from consortium.
- Absence of RIs like Sajjata Sangh, SVA etc which has led to issues of networking within the institution and also in the value chain.
- Loose internal control systems at FPC level poses challenges in maintaining desired quality.
- Limited market linkages and verticals in consortium as it faces stiff competition from local and regional players.

The challenges of the consortiums identified can be categorised as; a) capital: member FPCs have gained outcomes in the collective transactions but with thin margins and a still lot to explore; consortiums have struggled on generating revenue source, therefore this area is still to be tested further and needs support b) capability: the consortiums have their own capability constraints which is even tested hard when transacting with member FPCs with limited capabilities; institutional building is not consistent c) compliance: compliance support is extended only during active transactions, it becomes a struggle for the non-participants FPC to sustain d) coordination: transactions with other prominent value chain actors but there is absence of social capital in the collective institution.

9 Key lessons learnt

The following chapter comprises of key lessons learnt based on logics and assumption applied to the inferences developed from the research findings and analysis. The lessons are divided into the sections of business models and challenges of FPCs and consortiums (compliance, capital, capability and coordination). In certain cases there would be overlap of lessons among the above listed sections but it would certainly be highlighting the learning under that section. Especially in section 5.1 there would be lessons comprising of other sections also.

9.1 Business models still under experimental stages

- The consortiums are in nascent stage and have different business models involving different types and sizes of value chain models.
- Different work culture of sponsors tends to orient their FPCs differently. And the resource institutions involved add further complexities to the business culture of FPCs in the long run.
- Consortium involved in repetitive transactions along with a certain member list tends lose its coordination and active participation from other non-participating members. But over a period of time, if the consortium has been able to establish its value chain activities there are strong chances of inactive members showing participation or new members getting added.
- Consortium with large membership base and with no prospective large scale (by volume and impact) or diversified activities which involves substantial amount of members tends to lose participation and interest from the members left out; as in large groups social cohesiveness is not strong leading to trust deficit.
- Step by step approach required for the state-level federations for a period of four to five years to go through various pilot works and trial and errors to know which activity is viable.
- There is no one-model to be fitted for the federation/consortiums. Agricultural value chain has a plethora of activities and models to share benefits and federations/consortiums can adopt any such models or activities based on their context and characteristics

- Within a federation there can be FPCs or group of FPCs which can act as sub federation. They can have focus on one particular commodity or set of common commodities.
- Overlap of functionaries of FPC and consortium as there is no specified distinction of roles and responsibilities of the consortium.
- Cluster formation of FPCs works efficiently in commodity specific value chain development framework.
- Corporate functioning with decentralized governance and democratic decision making is integral to sustainability of the federation.

9.2 Compliance Issues Handled at Higher Order of Governance

- Largely members are dependent on the consortium or PI/RI (wherever active) for compliances.
- A promoting institution involved in strengthening of FPCs for a long period are more effective in extending hand holding support even in the facilitation of federation and act as an arbitrator in many contexts.
- Relevance and concept of government schemes are not clear. There is absence of business centric model approach in the supporting schemes.
- For payment issues the farmer members of FPCs do coordinate along with consortium only if the collective action is repetitive in nature.
- Compliances are more complex for consortium entering into new or alternative activities.

9.3 Capital Needs Are Still Not Met

- Sustainable value chain financing are completely absent in the value chain models.
- Working capital is a long drawn issue for the consortium.
- With entry and functioning of consortium, the competition in the market has become fair and there have been increase in price outcomes.

- Income benefits received by participating member FPCs has led to further active participation with the federation thus mutually benefiting each other.
- Thin margins in commodity trading.
- There are many benefits like bargaining power, business skills, and efficiency in collective decision making which cannot be quantified at individual or institutional level.
- With lower volumes and fluctuating revenues; infrastructure development, taking up new activities and acquiring of resources has been a huge hurdle.
- Inadequate infrastructure at FPC units adding complexities in storage, procurement and processing operations.

9.4 Building Capabilities Is More Complex

- A federation formed through bottom-up conceptualisation of FPCs coming together tends to be stronger in functioning and resolving issues.
- Consortium efficiently tackles the challenges of collective decision making where members are known to each other and/or social cohesiveness is strong among members.
- Dearth of manpower in management team at consortium and member FPC level.
- Capability and active participation of the management of the member FPC has a significant role to play in the coordination of collective activities.
- A mature FPC which has strengthened its position in the value chain can also move towards forming a federation.
- Absence of decentralised functioning in handling primary value addition services at FPC level adding burden on the operation handling.
- Strong leadership, commitment and risk taking ability of the managing and governing body is essential for federation to work as an aggregator of aggregators.

- Federation with strong emphasis towards building and maintaining social capital has been able to ensure cohesiveness among the stakeholders. This has developed confidence among the members to involve in the risk sharing.
- Member FPCs with efficient business and financial plans and strong leadership with active participation has been able to repetitively (and successfully) transact with the federation.
- FPCs where PI/RI intervention and implication is still visible and institutional members are strong tend to be more active in collective decision making.
- The credit of diversified procurement operations of the consortium goes to the dispersed presence of member farmer producer companies across the state.
- RI role is integral to the institutional building and strengthening as: a) it works as a connecting medium, b) strong regional linkages and c) information dissemination
- Member FPCs need to be strongly established at least at the production level. The consortium can take them to secondary level.
- Federation will be strong and efficient with matured FPCs in the initial stages of formation of federation. The matured FPCs help in developing business plans of other FPCs in their respective regions.
- Incapability of the consortium to resolve both market risks (vertical) and institutional risks (horizontal).

9.5 Strong Coordination with Other Players but Missing Among the Institutions

- Collective action is more when costs involved are lower and potential benefits are higher.
- Collective action and group approach are essential for establishing linkages in the value chain.
- Very low proportion of member FPCs participate/involved in the collective action and similar pattern is observed within FPCs where there is participation/involvement from a small section of the membership base.

- No involvement of bringing institutional members (lower order) in collective action of higher order institution.
- Members who are already engaged in certain collective activities are more likely to participate or get selected in a new activity (provided that the activity involved is generic in nature).
- Expertise is required in mobilisation, formation, functioning and strengthening of FPC and its ecosystem which cannot be delivered by one player or institution.
- Risk sharing in any sort of value chain activities would be achieved with linkages and strong coordination along with relevant value chain actors.
- Dialogue building along with federations across platform is crucial for knowledge sharing and creating healthy environment for growth of the ecosystem.
- Market players are limited who want to work on facilitative terms which would help the federation to tackle its challenges of capital and capability
- As energy has been already generated, there is need of synergy to resolve the internal challenges at various levels and contexts.
- With changes in leadership of member FPCs it becomes difficult for consortium to establish cohesiveness.
- Large membership base proves to be difficult in involvement of all shareholders in the limited set of collective activities.
- Unequal representation and composition of member FPCs and member farmers in the governing body of the consortium.

10 Recommendations and the Way Ahead

As per the analysis of the research findings, the federation/consortium has been able to largely tackle the challenges of compliance and coordination for its member FPCs and needs support in tackling capital and capability challenges. Though compliance has been handled largely in active transactions and coordination also has been more towards vertical (market) risks. Capital area needs priority and capability needs to be promoted at institutional and member levels. It is well capture in the present study that the performance and growth of consortium and FPC is more like a 'chicken and egg' problem. The strategies therefore should be towards developing both the players simultaneously as both are interdependent on each other.

10.1 No One Business Model Fitted, Work as a Facilitator

The consortium needs to have a long term vision with short term goals as the integral approach for attaining growth. Currently, largely there is absence of effective business plans and means to achieve the objectives. Without leadership capabilities this becomes difficult for it to function and the implications is further observed on the member FPCs. Based on this majority of the FPCs are struggling to enhance its performance. There are two core approaches or needs, a) Firstly; a business plan needs to be designed on the regional context and drivers of the FPC, b) Secondly; there is need of capability development of the leadership to generate methods to execute the activities.

Both of these can be fulfilled either by a full-time professional support (in the form of CEO) or through a resource institution (if any). The functioning and involvement of various members should fulfil the shared vision of the collective. In the present study we have seen that there are different business models adopted by the consortium. And, with different models and approaches comes sets of needs and challenges which has been covered in section 4.

Following is the recommendation list to adapt effective business models based on the identified needs and challenges:

Consortium needs to define its role and should be a facilitator and not a competitor

The role of federation is to be specifically defined as a facilitator and avoid ownership issues in the mutual transactions. It needs to ensure as much decentralized operations in the backward linkages. The FPCs need to at least handle the production operations efficiently and the consortium should work towards the facilitating the commodity in value chain.

Since the consortium concept is totally new, there is overlap of the roles between FPC and consortium and there have been many experimental models which have failed. It needs to place itself in the pyramid by tackling the challenges of the individual FPCs. With this the respective institutions with established functions should further focus on tackling the challenges of free rider problem and ownership issues. Federation need to initially work primarily towards forward linkages and after an established position need to focus on backward linkages also.

Institutional setup and governance for consortium

- Membership base of 50 (or even less) in the initial years of formation.
- It can opt for a large membership base only in case there are large scale operations involving substantive number of members like bulk procurement and direct buyer-seller meet etc.
- Compact size of governing body (not more than 10), followed by performance assessment and rotation policy to have representation from all members.
- Equal representation of FPCs and composition of member farmers in the governing body. The management should be involved in scouting enterprising directors and identification of team leader.
- Lay more emphasis on committees by defining its roles and responsibilities. The work needs to be monitored by the CEO also involving performance assessment on a regular basis.
- Presence of CEO/MD along with deputy CEO. The former can solely work towards advocacy and business development whereas the later can be involved in operations and hand holding support.
- Get additional directors or expert directors which would help in taking effective collective decisions and establish viable business models.
- Work towards providing entrepreneur skills to manage business activities and expand the business.

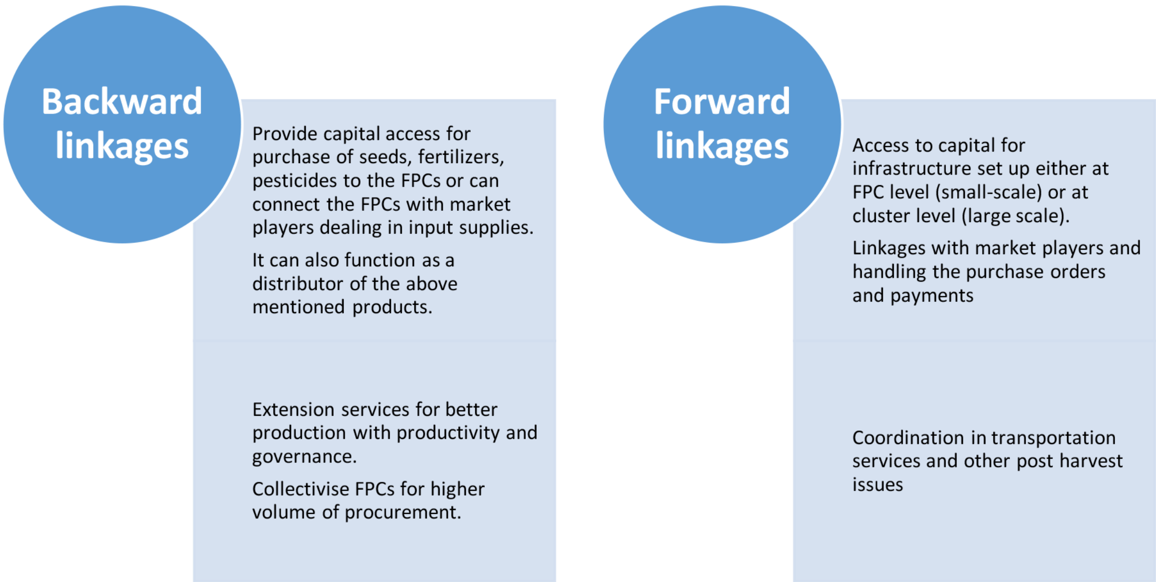
- Have regional offices and field officers (on a running basis would also do) for better communication and resolving issues at ground level. In the absence of such arrangements, certain FPC directors can be assigned as regional coordinators. This was also observed in the case of MahaFPC. The coordinators will function as community-based supervisor providing information on management and operational issues.
- Guide the members to mobilize enough credit support and bring benefits of government schemes directly to the member FPCs.
- Incentive to participating members over others to control the self-interested rational thinking of the individuals. This would also encourage the non-participants to display active participation and coordination.
- The consortium should practice disincentive to participants failing to commit in the transactions. But this should be in place only if the consortium has established itself in the value chain.

Commodity specific value chain development framework: since we are dealing in agriculture value chain, the main transaction benefiting the producers should be in commodity based activities. The commodity selection can be based on: 1) regional cropping pattern; 2) market driven. In the initial stages it would be advisable to start with the former one. The consortium needs to examine the traditional practices and the market channels. The value chain activity would vary between the two mentioned approaches and even within the selected approach. As per the observations and learning from the study the value chain models can be broadly categorised into the following categories:

- Involving particular value chain activity/ies for multiple commodities.
- Involving multiple value chain activities for particular commodity/ies.
- Involving multiple value chain activities for multiple commodities
- Involving particular value chain activity/ies for particular commodity/ies

The model adopted by the federation/consortium should be analysed by its sustainability factor. This involves the transaction costs incurred and income outcome fetched out of the activities. The periodical change in its institutional growth rate should be integral at it. Now this would also depend on the size and type of member's variable which has not been considered in this categorisation. This might have certain impact on the sustainability.

In the deliverables of value chain activity it depends on the consortium's constraint and capability to which areas of forward and backward linkages it needs to focus. The type and magnitude of facilitation to be played in a focused area would also vary and needs to be gradually enhanced. For example in value chain activity of seed production and marketing, the consortium can facilitate in the (not restricted to) following manner:



The approaches used can have various combinations with sustainability as the deciding factor. For activities involving other commodities the consortium can broadly divide its functioning and the governance in the following manner (sequence doesn't matter):

- Form cluster based FPCs and assign production and primary processing of specific commodities to it.
- Involve the FPCs in clusters for collective farming of a particular commodity
- Form commodity specific project management committee and team.
- (If any) Secondary and tertiary processing to be handled at consortium level or district/regional level
- Assign field staff to a collective of clusters and select district coordinators (any identified director) from within this collective
- Facilitate in marketing of the produce at the FPC level where the FPCs would also handle packaging and branding and marketing to an extent

- Collectivise the produce from clusters and move towards branding and marketing in higher order of markets (inter-state, intra state, export etc).

This are not some rigid set of protocols which every consortium need to handle but can be adopted based on its context and characteristics. With constant effort and investment in one particular commodity or value chain activities, the federation can improve its creditworthiness and performance.

M Tomato Farmer Producer Company Limited (Chittoor, Andhra Pradesh)

M Tomato is a federation of nine registered FPOs based out of Madanpalle region (Chittoor district, A.P.) These FPOs have been functioning for nearly three years, growing tomatoes and other vegetables. After operation of one year (registered in 2019), M Tomato has:

- Received incubation and business development support from Andhra Pradesh Mahila Abhivruddhi Society (APMAS). This helped in,
- Acquiring wholesale dealership for Coromandel Fertilizers,
- Marketed 562 tons of Tomatoes to Sunsip Agro Processors
- Accessed working capital and transport arrangements for its member

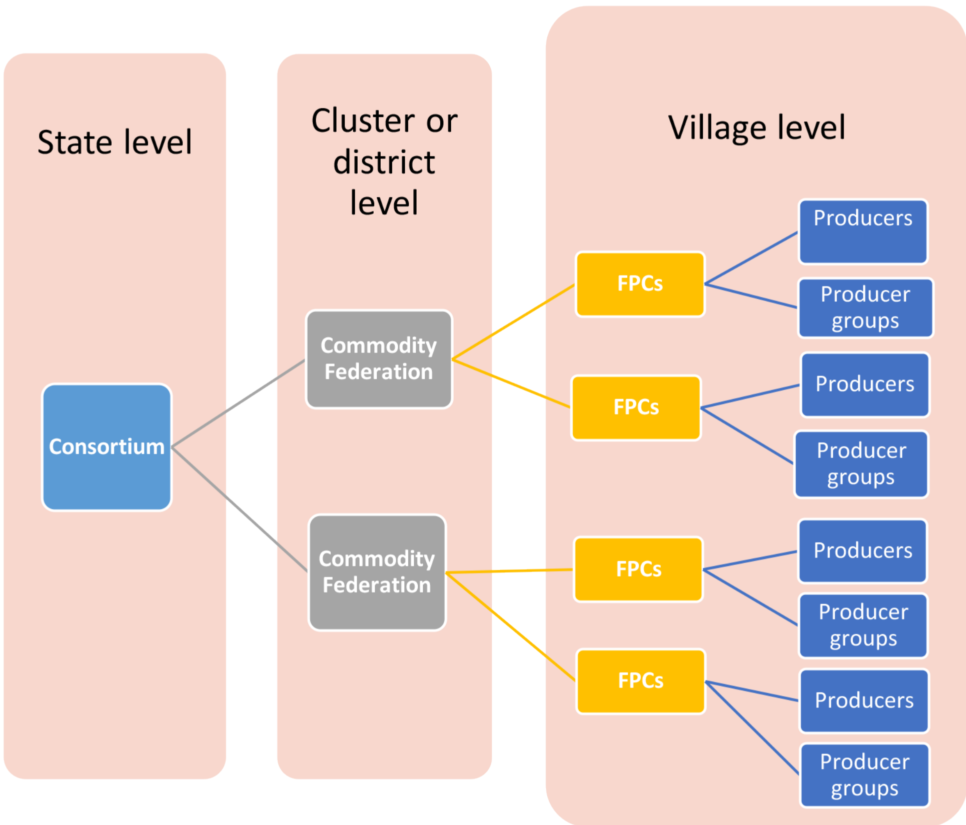
APMAS's intervention through M Tomato has been multi-pronged and coordination is along with multiple value chain actors like BigBasket, MetroCash and has also explored market linkages through NAFED and new 'Kisan Network' of the government. The commodity value chain approaches adopted by the federation has shown potential and build social capital. While the federation is new, the FPOs with their members have been associated to different market linkages (like retails chains and terminal markets) and were able to procure for a diversified market beyond the APMC (Reddy & Prasad, 2020).

Operational Risk. The first, market risk, refers to the risk to an institution resulting from movements in market prices, in particular, changes in commodity prices, interest rates, foreign exchange rates, and equity. The second, credit risk, attempts to place a value on the uncertainty associated with an account receivable. The third, operational risk is the risk of direct or indirect loss

3 Responses captured from Emmanuel Murray (Independent consultant) during his talk from ET-Samunnati FPO summit and award ceremony (organised on 18th October 2019, New Delhi)

resulting from inadequate or failed internal processes, people and systems or from external events. Since the FPCs are largely involved in commodity value chain activities, there are risks of poor quality and price fluctuations. The FPCs would not surely have expertise and capabilities to handle such issues. There would be need of 'commodity managers' who have expertise in managing the risks involved in commodity value chains, and have strong linkages with other important value chain actors. The role of commodity manager would be make the FPC ready for the market in terms of volume, quality specifications, crop varieties and crop husbandry practices. It can help in facilitating the FPCs through futures market and gain benefits through risk hedging on commodities.

Figure 5 Organisational setup of state level consortium



The figure 4 presents the proposed organisational model for consortium by the author. It comprises of a consortium at a state level with multiple commodity federation at cluster or district level. The participating FPCs and their member farmers become part of this commodity federation. In case of FPCs producing multiple commodities it can be part of the multiple commodity federation formed. The procurement and primary processing will take place at FPC level or at cluster level (in case the volume is less at FPC level). The regional coordinators will be responsible for information sharing at this level. The commodity based federation of FPCs will handle the operations and round-the-clock management and will be the nodal point for contact to the consortium. It will handle all sorts of value chain activities involving the particular commodity even including secondary and tertiary value addition services (wherever required). In case the consortium deals in large volumes of one or a few set of commodities, it can have multiple federations of the same commodity at cluster or district level. There will be need of field officers or/and commodity manager for the deliverables. And as the business expands over the years and more number of FPCs or/and commodities are added, we can also have multiple consortiums at state level.

Mobilize working capital from within the institution

Many have argued for FPCs to provide financial services (like loans, insurance etc) for its members which in return would generate alternate sources of revenue. But in the current time frame, the FPCs shouldn't function as a lending institution as there is absence of any efficient collection system like SHGs, MACs etc. But this can be carried out by the consortium provided they have capable management body.

- There is need of investment to come from within the organisation. The consortium will have to compel the Farmer members and FPCs to shell out more money in the share capital. But this can be effectively achieved only when there is trust and confidence inculcated among the institutional members.
- SHG saving models can be worked upon by the consortium to facilitate more investment from the ground participants.
- There are over 1, 78, 000 SHGs federations across India with a lending capacity of nearly Rs. 60000 crore[4] . The consortium can look towards them as sources of capital access.

Create 'local value chain' database

The Commission for Agricultural Costs and Prices (CACP) is an expert body which makes recommendations for nearly 23 commodities to the government and functions under the agriculture ministry. The broad list of 23 commodities comprises of seven cereals (paddy, wheat, maize, sorghum, pearl millet, barley and ragi), five pulses (gram, tur, moong, urad, lentil), seven oilseeds (groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower, nigerseed),

4 Data collected from closed group discussion on FPO institutional building organised by IRMA-ISEED (12th March 2020)

and four commercial crops (copra, sugarcane, cotton and raw jute). It shares its recommendations to the government in the form of Price Policy Reports separately for five groups of commodities namely Kharif crops, Rabi crops, Sugarcane, Raw Jute and Copra. It has comprehensive data on production costs and domestic/international prices for the above listed commodities.

National Innovations on Climate Resilient Agriculture (NICRA) is a network project of the Indian Council of Agricultural Research (ICAR). It prepares district wise agricultural contingency plans based on weather conditions, climate changes and other important parameters.

The data obtained and framework used for CACP and NICRA is something which can be applied with the local knowledge to create a "local value chain database'[5] by the consortium. This can prove to be beneficial in making efficient decisions in backward and forward linkages of the value chain.

Linkages with untapped potential market players: there are many untapped traditional and new market players who are dependent on a diverse list of agriculture and allied sector commodities. The list comprises of hotels, restaurants, canteens/mess, schools/colleges/universities etc. It can supply fruits, vegetables, dairy, poultry and other such items on bulk orders to this clientele. Such clients would also benefit from better negotiated price which were earlier exploited by middlemen. The FPCs would ensure quality requirements and timely delivery and in return would receive better payments and other business opportunities. The consortium can have other non-member FPCs or non-member producers involved in case there is shortage of supply from member side.

Government support in creating value chain activities

For consortiums functioning with a substantial membership base or capability of procuring large volumes should be involved with MSP/PSS/PSF procurements in the early stages. This should be based on small-scale procurement as a pilot study and based on experiences need to be scaled at a higher level. This would be a 'starter pack' for the consortium similar to the agri-input trading of FPCs. In the large scale procurements with not much expertise required (no value addition services), the consortium would be able to involve as many players. Apart from fetching revenues this would entail trust and confidence within the institutional set up. The states to recognize established consortium/ federations as state level agency for government procurement operations and other allied activities.

5 Responses taken from in-person communication with Mr. Vijay Mahajan

There is need of more programs like National Vegetable Initiative for Urban Cluster (NVIUC, started in 2011-12) and Operations Green[6] (focus on tomato, potato and onion growing producers; started in 2018-19), with promotion of FPO value chains at the integral. Unlike the food grains, the horticulture crops ensure better prices (with strong supporting ecosystem) and with short cultivation cycle, the frequency of operations can be also repeated. But in the present study we haven't seen much development in consortium or FPCs being involved in horticulture crops. This shows the huge market potential for the FPCs to absorb. The programs should focus on price stabilisation measures in the short run and gradually move towards strengthening the value chain activities of the FPOs.

Giving easy access to APMC mandi to FPCs: Though certain FPCs have availed mandi licenses but the registration process is quite complex and full of compliance issues. Even the consortiums haven't had large experience in the mandi transactions. This becomes important for consortium in states where the APMC acts are very rigid and tough to trade through. In cases like this the consortium in absence of other market interventions will have to go through the APMC mandi transaction. In states like Bihar and Kerala, the APMC act has not been adopted or practiced thus giving the space to the FPCs to trade in both perishable and non-perishable items.

- The respective state governments need to ease out the registration process and ensure market entry for FPCs.
- The mandi cess levied on the FPCs for any transaction even after availing mandi licenses, needs to be scrapped away to give incentive to develop more market linkages. MBCFPCL has managed to bring down the tax involved in such transactions for its members.
- Commodities should be removed from the ambit of APMC mandis so that FPCs gain the freedom of trading their produce and develop their own marketing channels.

To categorize FPC as 'agri-startups' and bring it under the ambit of Start-up India scheme: The start-up risks are not covered by FPO promotion programmes. Therefore the FPCs should be extended benefits provided to private limited companies under the Start-up India scheme. This should be carefully studied to not disturb the conceptual basis of formation of FPC. This will enable assistance needed by the FPCs in its incubation stage and regulatory compliances can be applied as the FPC matures in the longer run.

6 For more information: https://mofpi.nic.in/Schemes/operation-greens

Integrate the business with NRM activities: The government should involve the consortium in the activities under Deendayal Antyodaya Yojana- National Rural Livelihood Mission (DAY-NRLM). This would help FPCs get funding for carrying out activities which falls under their objectives. As of date, the government (more specifically the ministry of rural development) under DAY-NRLM mission has promoted 135 FPOs[7] in 12 states of India.

Consider the consortium as primary agent for agri-extension services. The consortium can also function as nodal point for agri-extension services. It can be looked as a one-stop window solution for the member FPCs.

Linkages into MNREGA activities: there are strong linkages between MNREGA and agri activities. Especially it is the SMHF and the landless farmers who benefit from the 100 days work guarantee under the scheme. This fetches at least a minimum wage for 100 days during the off-season of cultivation. There should be arrangements done by the state government to link certain activities directly to the consortium and its member FPCs. Like we observed in the case of MBCFPCL, the non-participating FPC farmer members joined in for the operations on a honorarium payment. This indicates the need of alternative income sources by the farmers. A formal structure like MNREGA activities would assure this flow of income to the members of the consortium.

Formation of SPV for viable business opportunities

The consortium should undertake business activities through the path of special purpose vehicle. This would primarily ease the capital crunch and allow private capital to flow in the functioning without affecting the legal entity and structures. There are examples of Krushak Mitra Agro Pvt Ltd (Yuva Mitra) formed through joint collaboration of promoting institution, FPCs and private players. There are various ways to function as special purpose vehicle thus the consortium should initiate a SPV at a pilot level. Based on the experience it can decide on scaling it. SPV suits a viable model for risk sharing as with its failure there is no serious impact on the actors involved. This will build confidence among the value chain entities to venture into new zones and reap benefits out of the transactions.

Under the Micro and Small Enterprises- Cluster development Program (MSE-CDP), the government should consider group of FPCs as SPV. In the current form only individual enterprises under the Udyog Aadhar can form an SPV, farmers are excluded from this. The FPCs can form a cluster unit to avail the

7 For more information: http://mksp.gov.in/ClusterProject/producerSummary.do

common facility services under the project. The FPCs comprising of traditional industry artisans, needs to be considered as SPV under the ‘Scheme for Fund for Regeneration for Traditional Industries’ (SFURTI).

10.2 Handling Compliance Would Require More Set of Hands

The compliance issues are categorised mainly on the quantum of the compliances or/and incapability of the institutions. There is need to understand the list of compliances which the institution is capable of handling and then chalk out alternatives to ease out other compliances.

RBI to address grievance and compliance issues faced by FPCs in availing loans from banks: Under the Reserve Bank of India (Priority Sector Lending-Targets and Classification) Directions (2019), the RBI has comprehensively broadened its services for FPCs. But it needs to make the FPCs and the banking officials aware of the guidelines. There is a huge gap in the declared provisions and actual delivery of it. The RBI appoints the SLBC- level standing committee for addressing various challenges adhering to SHG. There is no such mechanism in place to monitor the grievances and compliance issues faced by the FPC beneficiaries.

Normalising the compliances under the Companies Act

FPC being a private limited company (special type) has to comply with lot of compliances under the Companies Act. This adds to the complexities of the governing body and management body. Under the companies act the business structure of the FPC cannot be converted into other structures like private limited company, public limited company, limited liability partnership (LLP) etc.

There is need of amendment under the Companies Act which would allow the FPCs to do business under Limited Liability Partnership (LLP) form. This will ease legal restrictions and not burden small and marginal farmers. This needs to retain the status and features of the FPC. The advantages of working in the form of LLP in the context of FPC are as follows:

- **Easy to form:** Forming an LLP is an easy process. It is not complicated and time consuming like the process of a company. The minimum amount of fees for incorporating an LLP is Rs 500 and the maximum amount which can be spent is Rs 5600. This is even less than the registration costs of FPC.

- **Limited Liability:** The partners of the LLP are not liable to pay the debts of the company from their personal assets. No partner is responsible for any other partner misbehaves or misconduct.
- **No compulsory audit required:** Every business including FPC has to appoint an auditor for assessing the internal management of the company and its accounts. However, in the case of LLP, there is no mandatory audit required. The audit is required only in those cases where the turnover of the company exceeds Rs 40 lakhs and where the contribution exceeds Rs 25 lakhs.

But due to various tax benefits and provisions many states restricts the formation of LLP in their states. This might lead to a disadvantage and the amendment should also cover this.

Extending benefits from the negotiable warehouse receipts

- o State government should curb the compliance issues for WDRA registration by taking it under their respective warehouse licensing laws.
- o Warehouses constructed through government assistance and other agencies facilitation must be directly taken under the ambit of WDRA. This will extend market related services to SMHF.
- o WDRA registered warehouses should be given the status of mandis for warehouse-based sales on E-NAM platform.
- o The centre can appoint Warehousing Development and Regulatory Authority (WDRA) to issue NWRs to cluster of FPC applying for a warehouse/cold chain facilities and WDRA should act as the collateral.
- o Warehouses present at grassroots-level collectives primarily owned by Primary Agricultural Cooperative Societies (PACs) should be also allowed to issue NWR receipts.

Risk sharing mechanism

More emphasis is needed on the risk sharing mechanism involved in the transactions. Compliance and other issues involved in the transactions should be integral at the working of the federation. The consortium can adopt various agricultural value chain financing instruments to mitigate risks and share it among the various actors involved in the value chain activities. But this will work only with strong coordination and trust among actors and efficient management handling at institutional level. Following table 5 lists down certain lists of instruments[8] which can be adopted by the consortium.

Table 5 Risk sharing mechanism in agriculture value chain

Instruments	Brief description
Insurance	Insurance products are used to reduce risks by pooling regular payments of many clients and paying out to those affected by losses. Payment schedules are set according to statistical data of loss occurrence and mitigate the effects of loss to farmers and others in the value chain from natural disasters and other calamities.
Forward contracts	A forward contract is a sales agreement between two parties to buy/sell an asset at a set price and at a specific point of time in the future, both variables agreed to at the time of sale. Forward contracts allow price hedging of risk and can also be used as collateral for obtaining credit.
Futures	Futures are forward contracts – see definition above – that are standardized to be traded in futures exchanges. Standardization facilitates ready trading through commodity exchanges. Futures provide price hedging, allowing trade companies to offset price risk of forward purchases with counterbalancing of futures sales.

Source: Agricultural value chain finance strategy and design (Miller, 2012)

10.3 Availability and Accessibility of Affordable Capital is Required

The choice of business model to be adopted can also be seen as slow growth versus fast growth strategy. In case of slow growth model (mainly commodity trading with primary processing) there is scope on institutional building and capability development but the profit margin is thin. And for fast growth (mainly value addition services), there is need of significant capital. For FPC model this becomes a huge bottleneck as its working capital is limited by the equity shareholding of its members and other sources of credit access has largely

8 For more information: https://www.ifad.org/documents/38714170/39144386/Agricultural+value+chain+finance+strategy+and+design.pdf/1ae68ed6-4c3c-44f4-8958-436e469553bb

not been a healthy experience. Thus it becomes necessary for institutional support and access to capital needs and also analyse a suitable institutional format for FPC consortium.

Centre and State government need to design packages for giving working capital (dedicated for each sector) to consortium for at least 5 years. Also there is need of different financing models needs to be adapted at incubation, growth and mature stages of consortium.

- o Dedicated working capital support for covering operational costs which include rent payments, office set up, manpower hiring, input purchase, transportation etc.
- o Dedicated fund or Grant support or term loan support (single digit interest rate) for setting up infrastructure like poly-house, dryer, warehouses, cold storage units, primary/secondary processing plants and farm machinery equipments.
- o Extend grant support to resource institutions involved along with consortium or its member FPCs which play a vital role in formation and facilitation of FPCs.

Role of RBI in creating affordable credit access[9]

- At least 0.1 per cent of annual agriculture credit target of banks to be mandatorily extended to FPCs.
- Extend the PSS guidelines of RBI to include NBFC credit to FPCs as agriculture credit and refinanced by banks to count against their target.
- Data on credit provided to FPCs should be part of RBI monitoring and reviewed at SLBC/SLCC meetings.

Role of agencies like NABARD and SFAC:

- ***Advocacy with Banks:*** It is required by NABARD and SFAC to advocate on this and educate the bank with financing models to FPCs. This can be targeted at state level and district level forums like State level Bankers Committee (SLBC) and District Consultative Committee (DCC). The regional rural banks (RRBs) can be used by NABARD to extend working capital finance and term loans to FPOs.

9 Responses from meetings and consultations of NAFPO team

- ***NABARD should relax the condition of three years for FPOs to avail the benefit under the Producer Organization Development Fund:*** This will give the much needed initial stage support to FPOs in its incubation stage.
- ***Moratorium given by NABARD for its loan is 2-3 years:*** these needs to be extended to beyond 5-7 years to give support and handholding for sustainable functioning of FPCs.
- Amendments under the SFAC equity grant scheme:
    - o For relatively high-performing FPCs there is need to extend the equity grant limit of Rs. 10 lakhs and remove the bar of paid up equity of Rs. 30 lakh. The equity grant support has played a key role in functioning and performance of various FPCs. And since FPCs are engaged in agriculture which is a cyclical economy such capital support will be always beneficial.
    - o SFAC should ease out the documentation required to apply for the grant scheme. Compliances like: submission of resolution for CEO appointment, audited financial statements for last one year and bank statement for last six months; all of these should not be mandatory as it delays the process of attaining grant support for FPCs in the incubation stage.
    - o Under the 'Strategy paper for promotion of 10000 FPOs'[10] prepared by SFAC, the paid up equity has been raised to Rs. 15 lakh per FPO; this needs to be further increased for good performing FPCs who are in need of capital.
    - o The SFAC needs to revise its equity grant ratio of 1:1 to 1:2 or even higher in cases of consortiums. SFAC has increased the farmer equity share to Rs. 2000 at FPC level, this needs to be much higher (at least Rs. 10000) for consortiums where members are FPCs themselves.
- Amendments under the SFAC credit guarantee scheme: Only 43 cases have been registered from 2014-February 2019 (source: SFAC website) under this scheme which aims at extending big size credits to FPC to meet their capital needs. This is a paltry figure compared to the rising numbers of FPCs in the Indian context.

10 For more information: http://sfacindia.com/UploadFile/Statistics/StrategyPaperonPromotion10KFPOs.pdf

- o There is no clear rational of 500 members set as the eligibility criteria under the scheme. This is difficult and not viable for any FPC in its incubation stage to attain such member base.
- o On the other hand it is lending institution which has to approach the SFAC seeking guarantee cover over the FPCs. This further discredits the entire concept as the lending institutions[11] have no interest in putting in so much of efforts and risks.
- o For high performing FPCs, the SFAC (2019) has increased the credit guarantee cover to projects up to Rs. 2 crore (around Rs. 1.5 crore amounting to 75% of the total cost). There is need of **guarantee fund** to cover the lending to FPCs beyond this limit (at least to Rs. 5 crore) especially when the activity involves higher secondary and tertiary processing value chain activities.
- o For consortiums there is need of much more higher lending coverage under the SFAC credit guarantee scheme as they deal in much more higher volumes and large scale activities than its member FPCs.
- o NBFCs funding to FPCs should be eligible for SFAC credit guarantee.
- o SFAC should enter into a portfolio lending model[12] which would automatically cover loans of FPCs under the scheme on fulfilment of certain criterias.

- The ***SFAC venture Capital Assistance Scheme*** should amend the mandatory criteria of FPCs having term loan (long term) sanctioned by banks. Such rigid criteria cannot be fulfilled by FPCs as they have been regularly suffering from non-availability of loans from banks and other lending institutions.

Setting up of 10000 FPOs announced by government:

The centre government in the budget 2020 has sanctioned Rs. 500 crore in the budget for setting up of 10000 FPOs across the country. The new scheme titled ‘Formation and Promotion of Farmer Produce Organizations (FPOs)’ has been allocated a total budgetary provision of Rs 4,496 crore for five years (2019-20 to 2023-24) with a further committed liability of Rs 2,369 crore for period from 2024-25 to 2027-28 towards handholding of each FPO for five years from its aggregation and formation.

11 The lending institution requires paying 0.85% of the credit sanctioned in addition to a separate annual charge.
12 Responses captured from Emmanuel Murray (Independent Consultant) through his talk in a conference

- The new policy lays no emphasis on the status of the existing FPOs and no policy action has been laid down to tackle their challenges.
- The implementing agencies namely SFAC, NCDC and NABARD should work towards involving the consortiums in the implementation of the schemes.
- CBBOs appointed by the agencies and respective states should have consultation along with the consortium/federation formed in various context.

Amendments in the PART IXA of Companies Act 1956: Producer Companies

- Under the section 581P (6), the limit of expert directors or additional directors to be increased for the consortium. Currently it is one-fifth (or less) of the total number of board of directors for FPC.
- Under the section 581U include mandatory clause for assessing performance assessment of committee's formed.
- Under the section 581ZK and section 581ZL the consortium can facilitate credit support to the member FPCs.
- The FPCs need to apply again for revising their authorized capital. This involves further time and compliance issues and acts as hurdle for FPCs who are willing to expand their authorized base (and shareholder base). This should be amended to fasten up processes.
- As per the article of association, the farmers who have businesses in conflict with the activities of FPC should not be disbarred from being the FPC member. In fact such players should be used to develop more linkages and help FPC in establishing business activities.

Research and development fund- The centre needs to set up a dedicated fund which can help in developing research/documentation. The dedicated fund can be also directed towards building knowledge base and developing methods to promote growth of FPC ecosystem on various parameters. Since FPC consortium is a new concept in the Indian agrarian context, there is need of extensive research and development work in this field. However, overall there is a requirement for more case studies that can give significant insights to create newer theories or models for both researchers and practitioners. With a dedicated funding source there will be more players who would participate in value addition of services and knowledge in this domain.

Set-up a technology support fund: The nodal agencies at centre and state level should build a dedicated fund for FPCs and consortiums to access technology platforms and services. These are quite expensive and not viable for them considering the low volumes of profit margins. This would enable the consortium/FPCs to work on efficient productivity, effective governance and cut down transaction costs involved in the value chain activities.

To set up a dedicated agri-business bank: For FPCs to venture out in extending financial services there is need of interest subvention scheme for the FPOs in their incubation stage. This can be targeted with setup of a dedicated agri-business bank in India which will focus towards financial needs and services to be provided to the farming community. Currently none of the banks in India specialize in lending in agriculture sector.

Enable the use of land as resource to FPC consortium: There is need of change in legislation to allow collateral on collective land of FPCs while retaining the land shares and entitlements. This will benefit the FPCs in generating loans from the banks required for their functioning. One more way of dealing this would be that the Ministry of Corporate affairs should provide some government land on long-term lease to the FPCs. This can be used for opening up of input centers/warehouses and also used as collateral.

Support services to FPO as collective agency: Extend benefits and exemptions offered to cooperatives to FPOs also. And there is absence of any tailor made loan products for FPOs as it was done in the case of SHG-Bank Linkage Program.

Mandatory CSR obligations to invest in growth of FPOs: Under the Companies Act 2013 currently there is provision of non-voting equity rights sanctioned for the FPC ecosystem. The SFAC equity grant scheme is one example of it. The SFAC can grant equity to the FPC but cannot be member of the FPC. Under such circumstances without any legal obligations no private equity will have interests in supporting the FPC as they will have no voting rights and presence in the board of members. Therefore the Ministry of Corporate Affairs (MCA) needs to bring provisions of CSR obligations (private equity) under the Companies Act 2013 and thus create investment channels for the FPCs. This can be applied at the consortium level which is also registered as a FPC

- Under the List (viii) of Schedule VII of Section 13 of Company Law which defines 'social business projects'- this can be expanded to FPC sector.
- Add FPC in section 2(15) of the Income Tax Act, 1961 which defines "charitable purpose"- this will probably open space for drawing philanthropic capital to FPC ecosystem.

There is another example of its kind initiated[13] by Punjab government in 2018 (Khanna, 2018). The government along with the Punjab Agricultural University had proposed for setting up a dedicated fund known as 'Kheti Kosh" which will receive grants from corporate bodies (under CSR) who wish to promote the agriculture sector. This fund would be used to promote the growth of FPOs.

Agriculture value chain financing models (AVCF)

As the consortium will grow it needs to emphasize on the sustainability of its activities. And shift towards value chain financing in its activities. This would enable risk sharing among the actors involved and resolve the challenges of trust, network and capital. This can be divided into two broad categories: a) internal value chain finance: financing takes place within the value chain, such as when a processor provides credit to the producers, and b) external value chain finance: financing is given from outside, such as bank loans and warehouse receipt financing (Miller, 2012). The business model in the value chain is the process of adding values through the coordination of primary producers, suppliers and consumers. A value chain activity doesn't necessarily need to cover the entire sector; in fact it is a more specific process involving relevant actors and linkages. The primary objective is to shift from an uncontrolled value chain towards a more integrated model thus improving the prospect for financing both within and into the chain. The following table 6 depicts the basic functioning models to which various financing instruments can be applied.

Table 6 Typical functioning model adopted by farmer collectives

Model type	Key drivers	Description
Producer driven	Small scale producers	Access new markets Fetch better prices Strengthened position in value chain

13 There is no data on whether the initiative has been actually implemented by the state government.

Buyer driven	Processors Exporters Retailers Traders, wholesalers and other traditional market players	Supply assured Large volume procured Quality standards met
Facilitator driven	NGO/PI/RI Government and agencies	Regional development Market for the poor
Integrated	Lead firms Supermarkets Multinationals	New and higher value market Market monopolies

Source: Adapted from Miller (2012)

Table 7 Common financial instruments

Category	Instrument
Product financing	Trader credit • Input-supplier finance • Marketing and wholesale company finance • Lead-firm financing
Receivables financing	Trade-receivables finance • Factoring • Forfaiting
Physical-asset collateralization	Warehouse receipts finance • Repurchase agreements (repos) • Financial leasing (lease–purchase)
Risk mitigation products	• Insurance • Forward contracts • Futures
Financial enhancements	Securitization instruments • Loan guarantees • Joint-venture finance

Source: Adapted from Miller (2012)[14]

The above listed institutional functioning models have their own set of advantages and disadvantages. Like in producer driven, the primary producers

14 For more information please refer to https://www.ifad.org/documents/38714170/39144386/Agricultural+value+chain+finance+strategy+and+design.pdf/1ae68ed6-4c3c-44f4-8958-436e469553bb

explore the market based on their profile but this leads to issue of market and financing. Buyer driven model is one of the most common one applied. Integrated driven model includes producers to other relevant important actors in the value chain (refer box 2). Through agriculture value chain financing, approaches for financing within and into the value chain can be evaluated. The above table 7 lists down the common financial instruments used in AVCF. The instruments can be used along or in a mixed manner. The MahaOnion SPV formed by MahaFPC and NAFED is a fine example of agricultural value chain financing model in practice.

Box 2 Operation green (passed in the 2018-19 budget)

This is one fine example of integrated value chain development projects under which:

- Outlay of Rs. 500 crore to stabilize the supply of tomato, onion and potato (TOP)
- NAFED as nodal agency to implement price stabilisation measures
- Grant-in-aid at 70% of the project (Rs. 50 crore limit)
- 50% subsidy for transportation and storage facilities

The government will help in capacity building of FPOs, quality production, post-harvest processing facilities, agri-logistics, development of markets and creation and management of e-platform.

The government should also rope in consortium as sub-agent of NAFED in order to execute the project and coordinate along with the FPCs.

10.4 Capability to be Developed in an Organic Manner

Manpower requirement with requisite capabilities

It is necessary to have manpower with required capability to carry out various functionaries of the institution at both consortium and member FPC level. Unlike the policy support that has been provided for building human resource capacities for the SHG movement, the capacity building budgets of most policies for FPOs is considerably low. The future of the institutions is largely dependent on the availability of excellent manpower locally. This needs a structure different from existing agricultural schemes and a more coordinated effort on what capacities to build, how to build and sequencing these modules attuned to the growth stage of the FPOs. The consortium should help out its member FPCs (at least where it is working or wants to work) to hire a CEO and set up a management body for the same. This would be a complex task as local players indentified are normally not capable enough to add to the efficiency. And players from outside normally feel reluctant to shift to rural areas. Therefore the consortium should work towards identifying and training the resources.

The starter package in the training program should cover at least the handling of the ongoing operations and way to communicate along with the consortium and other FPC associates. Further it should also train the board members of the respective FPCs to practice performance assessment of its governing body and management body. The consortium can also take help of other FPCs (which are not participating) in handling operations at a FPC site. This can be supported with a small honorarium to the external help available.

As the consortium gradually grows it needs to involve other market players for paid services of training and capacity building programs. For the management body of member FPCs to be formed there would be requirement of at least one CEO and two staff members along with CA for compliances. The consortium should ensure at least the participating members have the management body in place.

There is need of a full-fledged and full time working MD, CEO and staff members as part of the management body of the consortium. Being at a higher order of governance, it becomes more mandatory to have the requirements of experienced personnel to strengthen the consortium in the value chain. The benefits of this would be observed in the member FPCs if both the conditions of availability and capability of management body is met at the institutional level. As the consortium matures it needs to expand and strengthen its managing body with defined roles and responsibilities. It needs to also bring advisory or expert body for making efficient decisions. The consortium should scout various expertise from agriculture domain who have either retired or are comfortable to guide and assist the institution.

The training methodology for CEO to be institutionalised and developed by concerned institution viz. agricultural universities, entrepreneurship development institutions, NIAM, BIRD, NIFTEM, Manage, VAMNICOM etc. The core areas need to be defined. The training programs need to cover the themes as follows:

- o Business communication
- o Leadership, IPR and people management skills
- o Participative planning and team work
- o Problem solving and decision making skills
- o Basics of office management and administration.

Participatory learning methodology should form the basis of training programs. It will be more impactful through simulation exercises and games, and OBT activities along with classroom inputs, presentations and group discussions. The SFAC should introduce a fellowship program to bring in young graduates and experiences candidates to work along with the consortium and share their skills and interests. The consortium should also develop internship programs to invite applicants from various relevant institutions. This also would be a learning experience for the participants.

Developing business plan of the consortium and member FPCs:

- The RI should identify the potential business activities that can be carried out under the present conditions.
- It should list down the broader components of the business plan
- Identify various viable solutions or models to execute the proposed activities. And map directors for carrying out these tasks in dedicated sub-committees which will be supervised by the chairperson and the RI.
- For broader exposure and learning it should organize exposure visits or knowledge transfer with other better performing FPCs.
- It should integrate the identified role and functions of the FIGs/VLIs into the mainstream activities of the FPC.

Need of assessment tool and database for FPCs and consortium

There is need of assessment tool to check the capital and capability needs and performance of the institutions. There are already tools like ASCENT (prepared by BASIX), NABARD performance assessment tool and other tools (independent researches) developed and used in the FPC ecosystem. The models of M-CRIL can be also used to prepare a similar kind of assessment tool for the FPCs. There is need of a rating tool based on the lines of SHGs which would reflect the governance, management, capacity development and sustainability business model of the FPCs. This would serve the dual purpose of performance assessment and credit-worthiness of the FPCs.

Currently, there is scattered data available related to FPCs from various sources like MCA, SFAC, NABARD, NRLM, State agriculture departments etc. Normally the FPC registration data should be readily available from MCA but this hasn't been the case. In a unique manner, NABARD has a dedicated portal on FPOs promoted under their projects (https://nabfpo.in/images/staticFPO.html). Similarly, SFAC has also developed its portal on FPOs promoted under them (http://sfacindia.com/List-of-FPO-Statewise.aspx). The SFAC webpage also has links to other non-SFAC promoted FPOs by various states agriculture departments, NABARD, NRLM and self-promoted FPOs. The portals have uniformity in basic essential information like name, legal form, address, promoting agency, contact, commodities involved and primary activities. But the data available is not static in nature and still do not give a glimpse on the growth of the respective FPOs.

There is much need of a robust database to be prepared by the agricultural ministry (can be directed to SFAC) for maintaining records of overall FPOs formed and registered in India, till date. The database should have a better typology of FPOs that can separate the larger ones based on varied turnover (Prasad S. , 2019).

This will also help in keeping a track on the functioning state of the FPOs and bring them under one umbrella. This would be even beneficial for researchers, academicians and policy makers.

Developing FPO policies at state level

Agriculture falls under the state list hence the states have a larger role to play here. But it is surprising that even after 17 years since the inception of FPO, hardly any states have come up with their state policies and guidelines on FPO. In the timeframe of the study only four states had come up with their state level policies for FPO, namely: Odisha (2018), Karnataka (2018), Punjab (2019) and Tamil Nadu (2019).

Table 8 List of FPCs registered in India

State	Count of FPCs	Proportion (in %)
Maharashtra	1940	26
U.P.	750	10
Tamil Nadu	528	7
M.P.	458	6
Telangana	420	6
Rajasthan	373	5
Karnataka	367	5
Odisha	363	5
Other States	2174	29

Source: Adapted from (Neti & Govil, 2019)

Note: Data is updated till 31st March 2020

As per the above table 8 data; Maharashtra, Uttar Pradesh, Tamil Nadu and Madhya Pradesh constitute nearly 50% of the FPCs registered in India. In this only Tamil Nadu has a state level policy for FPO. And out of the total 7374 FPCs formed, nearly 80% are less than four year old (nascent stage). This highlights the importance of having a specific FPO policy at state level. Also from the state level consortiums/federations studied it is only Odisha and Tamil Nadu which have state level FPO policy. In fact TN consortium of FPCL was also involved in the consultation of TN state FPO policy. But none of them have been able to comprehensively tackle the challenges of FPCs. Major reason would also be that the policies are recently developed. The consortiums, namely: GUJPRO, MBCFPCL and MahaFPC have been relatively highlighted in the media, various talks and conferences and also recognised as state level agency by their respective state government. Interestingly none of them have any state level policy guidelines for the FPO ecosystem in their respective states.

A state level policy is needed to be formulated based on the needs and challenges of FPCs and consortium observed till now. And the promotion of FPCs should be under marketing department rather than horticulture department. There is a need to appreciate that FPOs have dynamic relations to both its members and the markets. State level FPO policies should desist from prescribing 'ideal' or 'optimal' numbers and work to create resilient business models, not just business plans, for FPOs. This requires analytically working on possible typologies of FPOs. There is also a need for a different model for rain-fed farmers who are being experimented in programmes like the Odisha Millet Mission or AP drought mitigation programmes that build on an Agribusiness Service Centre (ASC) model[15]. This would help in developing an enabling environment for the existing and new FPCs to be formed.

10.5 Coordination among Value Chain Actors is Essential

Building of social capital within the institution: The consortium needs to function in a way to strengthen the social capital through regular involvement of members in collective activities. With benefits being scaled and trickled down to the members it will be mutually benefited to the consortium in the form of strong coordination and further active participation. Trust and confidence are two primary things which would sustain the social cohesiveness among the various level of institutional setup. The growth stage of consortium should keep the development of its members FPCs at its integral. There is need of creating a self-reliant learning process to be mutually developed. In the absence of such developments there would be ownership issues still present. As the consortium would expand and there would be more FPCs formed, developing social capital would be instrumental in sustaining the ecosystem in the longer run.

Strong networking and dialogue with formal lending institutions: As per the discussion along with the consortium and FPCs, only few FPO specific lending institutions like Ananya Finance, Sammunnati, FWWB, NABKISAN, and Avanti have been actively lending to handful of institutions. The experiences have been more limited in case of consortium. The mainstream banks/local banks/ regional rural cooperatives have been averse towards lending to FPCs. For the banks, the business potential from FPCs in aggregate quantum is not of significance value, but this aggregated at a much higher order like consortium might reverse the picture. At times it is the person in need which has to go to the water source to quench his thirst. Therefore the consortium needs to be in constant communication with various formal lending institutions and also trickle down the benefits of the connection to its farmer members.

15 Similarly Revitalizing Rainfed Agriculture (RRA) Network works in the area of farmers from rain-fed areas. The RRA Network works with FPOs for fair procurement of produce, empanelment for public procurement, processing of and value addition of farm produce and ICT based solutions for efficiency in operations and marketing with other partners and service providers.

Tie up with agri-tech start ups for availing the benefits of technology to help farmers in the agricultural process: There are numerous agri-tech start-ups in the Indian market providing solutions to benefit farmers and simplify the agricultural process. These start-ups have made use of technology and placed themselves on different stages of the value chain. There is massive market scope for these start-ups but being new entrants their outreach has still been restricted. In order to maximize and disseminate the benefits to all there is dire need to bridge the gap between them. The policymakers need to help the FPCs in mitigating the compliance issues involved in partnering with such players and consult the agri-tech start-ups for designing policies and programs. Technology usage is needed for improving governance and alliance is needed along with agri-tech partners who can enhance the productivity and other activities.

Develop the platform of futures market for FPCs: The futures market ensures better price discovery and hedging their potential price risks by taking future prices into consideration (Chatterjee, Raghunathan, & Gulati, 2019). The FPCs can enter into futures market to regulate the commodity risks involved in its activities. In the past, there have been certain successful transactions done by FPCs on futures market platform. But the numbers of transactions and even FPCs involved is at a paltry figure. The success of futures market (which is still a very new concept) has been restrained primarily because of factors like,

a) Existing traditional market relationships and the trust deficit with new interventions,

b) Scarcity of FPCs involved in marketing and processing stage,

c) Lack of capability and capital faced by the FPCs and

d) Logistics issues.

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NCDEX the largest agri-commodity exchange in India has worked in the areas of connecting the farmers/ FPCs to the futures market. But even this has been hampered by institutional factors like, a) restricted list of commodities, b) dearth of delivery and procurement centres, that too not in the vicinity of the FPCs, c) Tedious documentation involved in the process.

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The highlighted constraints need to be addressed in the development model of FPCs to strengthen its position in the futures market and fetch better prices. State support is critical for sustaining futures market and the FPC ecosystem need to be educated and trained regarding the platform. The working paper of Mr. Ashok Gulati (2019) further highlights the measures to link more FPCs (also farmers) to the futures market:

a) FPCs need to deal in commodities which do not have any government intervention (crops procured by the government under MSP and other schemes).
b) NCDEX needs to identify production centres for these commodities and build delivery centres around them.
c) Have certain transactions (at pre-harvesting, harvesting or post-harvesting stages) on such commodities in the initial phase to analyze risks involved.
d) Trading agencies of government need to participate directly in the futures market (specifically E-NAM) to install trust among the producers.
e) Promoting institution/ RI or consortium need to play a significant role in training and capacity building programs.
f) More participation to be encouraged for FPO transaction on futures platform. This needs to be scaled as more players would be making entry, with focus on commodity types and volume.

Unless and until there are efficient and reliable market channels not established the FPCs will continue struggling in benefiting from the scale of economies through collective action.

Connecting the state level consortiums at a national level platform

There are certain grey areas to cover in the second-order governance (consortiums at state level); which has its own constraints and limited capabilities. There would be need of connecting various such players at higher order governance (at national level). In the current scenario, there is dearth on dialogue building and knowledge sharing among the consortiums/federations formed across India. An inter-dependent ecosystem would help in initiating inter-state transactions of their commodities based on supply demand economics. And this can be effectively achieved in presence of a common player connecting all the players in the FPO ecosystem.

There have been various associations/federations/consortiums formed at national/international level for various sectors. The National Association of FPO (NAFPO) is one such example in the Indian ecosystem. NAFPO is a registered non-profit organisation involving multi-stakeholders working towards institutional development and business stabilisation of FPOs across India. Its role is of a facilitator to work on advocacy like pushing policy guidelines; good practices that can be brought at one place and create an enabling ecosystem. It has focused in areas of; a) developing market linkages and financial linkages; b) capacity building. The organisation is led by a strong and highly influential steering committee comprising of various domain experts constantly involved in building and developing the FPO movement in India. The consortiums of MBCFPCL, MahaFPC and GUJPRO (which were part of the present study) are also part of the steering committee. This has given a platform for the consortiums to share information and knowledge. As the organisation grows, it would be good to see more consortiums being part of the movement. Further the NAFPO can also work towards driving the formation of state level consortiums based on the experience and learning of the current players. It is also working towards building a knowledge hub for FPOs across India. This consists of database, various researches/studies in the areas and relevant policies and schemes. It has a novel initiative of recruiting independent directors to the member FPOs which will bring their expertise to tackle various challenges. This is something which would help the FPOs and consortiums in connecting with key actors. NAFPO being a very new initiative has still a long journey to cover before establishing itself as an apex body of the FPC consortiums at national level.

Enhance networking and stakeholder engagement

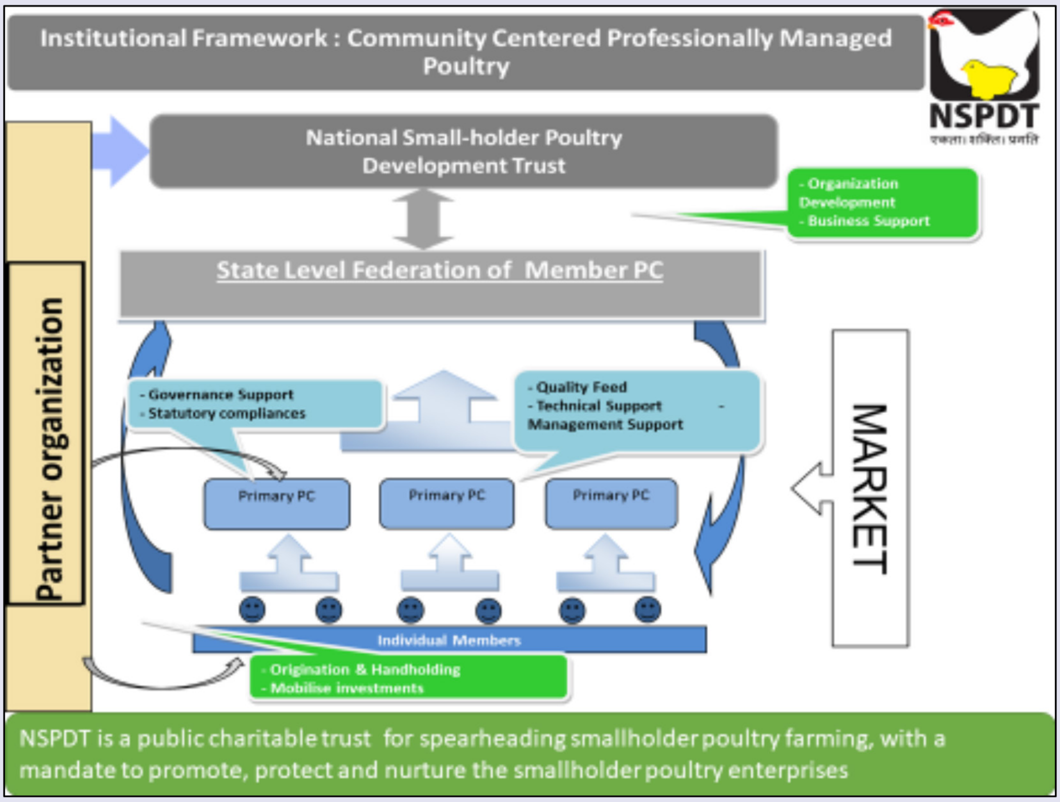
- The consortium needs to have strong communication and networking along with various government officials and people from agencies like NAFED, NCDC, NABARD, various bank etc and play a key role in advocacy and business development. SFAC and other nodal agencies can play a key role in connecting the initial dots.

- There is a kind of incompatible trade-off between practitioners and researchers. The practitioners demand very high instrumental knowledge, while researchers look at objectivity. There is a need to establish a framework that will help both the researchers and practitioners. Similarly there is need of liaison along with academicians, institutions, policy think tanks etc for building a knowledge sharing platform. This would enable in bridging and shaping the gaps between theoretical and practical framework.

- Academic institutions as knowledge brokers and networks such as NAFPO can provide innovative spaces for collaborative learning and co-creating solutions.
- Networking along with all sorts of media houses for displaying its work and putting forward its voice in the market.
- Active on social media platforms and other such channels to spread its success stories to the larger audience. And also update and maintain its website so that other players connect to them.
- Partner along with the RI/PIs involved or were involved along with the FPCs. This would help the consortium in understanding the different orientation and business culture across the platform. This would surely help in preparation and execution of 'shared vision' for the collective institution.
- The RI/PI can help in building and strengthening the social capital, facilitator and arbitrator in resolving issues in the FPCs and among the institutional network.
- Mentor/champion/influencer is needed at the consortium level.

National Smallholder Poultry Development Trust (NSPDT) (Tushir & Kanitkar, 2020)

The NSPDT is a national level effort focused on development of smallholder poultry across states of Madhya Pradesh, Jharkhand, Odisha, Assam and Maharashtra. It has a network of 14000 women poultry producers collectivised in 27 producer collectives (Co-operative societies/Producer companies). The NSPDT supports the farmer collectives in business and organisational review and guides them in implementing and adhering to smallholder poultry business systems and processes.



The value chain (as shown above) provides the producers all the necessary services such as access to high quality inputs and market, on-farm production supports, working capital, marketing of birds, and risk mitigation from input and output price movements, etc. The network created additional livelihoods for rural youth within their own communities. The network employs around 50 professionals, 300 support staff, more than 500 community-based supervisors, and 400 workers at the breeder farms and hatcheries

It nurtures smallholder poultry networks and promotes initiatives to increase the number of farmers, helping launch new producers. With the promotion of backyard poultry NSPDT has enabled tribal women in many states earn a respectful livelihood and run successful poultry enterprises. NSPDT model incorporates industrial poultry to a small woman farmer in a remote village. It does this by organising women into collectives, creating systems and processes for them to attain industry competitive production and scale efficiencies. The enterprise gives the woman farmer an income for her labour while giving her the dignity and control of an owner. The collectives, along with the associated units such as hatcheries, breeder farms and feed plants, working under the aegis of NSPDT, posted sales of Rs 524.6 crore, in the year 2018-19. Its producer companies and federations have been praised for their works and awarded at various platforms. But there are still issues of coordination, capital and capability needed to tackle to sustain the value chains in the longer run.

For more information: https://nspdt.org/2020/01/07/http-pashusandesh-com-national-smallholder-poultry-development-trust-highlights-2019/

Image Courtesy: https://economictimes.indiatimes.com/news/economy/agriculture/up-brings-policy-to-set-up-2000-new-farmer-producer-organisations/articleshow/78388642.cms?from=mdr

11 Conclusion

How have FPOs scaled in the last decade? Are there signs of their effectiveness or are they spreading too thin and too fast? Importantly, beyond the ambitious vision are there sufficient investments to build these new generation institutions? How and where have FPOs spread in the last decade? Can complex institutions of farmers spread in the same manner as infrastructure projects like building roads, constructing power plants and toilets? What does it take to transit from a production and productivity-oriented paradigm to one that looks at the livelihoods and incomes of farmers through an entrepreneurial route? Are we ready for this new thrust?

From the perspective of institutional building, the present study has tried to examine whether collectivisation of institutions (at second order) is able to tackle the challenges of individual institutions (first order). Here, the second order institutions are referred to consortiums and first order institutions are its member FPCs. The consortium model has been tested in the context of its business models and challenges of compliance, capital, capability and coordination. A few have sustained and are doing relatively better in their respective value chain activities. They have undergone a brief learning stage with gaps unfilled. But certain consortiums haven't been able to sustain over the period. This left us with a reduced list of consortiums to be studied which could have given us a more comprehensive outlook.

At institutional level it has been largely able to tackle the challenges of compliance and coordination of member FPCs. Even in this, the compliances had been largely dealt in cases of active operations and in other cases it was completely left on the capability of the FPCs. For coordination it has been more effective in growing vertically and addressing the market risks, whereas the horizontal growth has been at a slower pace. The challenges of capability and capital are still filled with grey areas and the model of second level institutions still has a long journey to cover in this. It has been observed that apart from the role of fulfilling needs of FPCs, the consortium had its own set of constraints, needs and limited capability.

The government has immense responsibilities of tackling the agrarian crisis and empowering the producers in the value chain. But its outreach and implication is constrained. And as there would be more FPCs formed it would be more important to answer to the sustainability considering the complex challenges the earlier FPCs have faced. The consortium model still in its nascent stage seems to have potential to fill in these gaps. In the nearby time, it needs to balance the efficiency, equity and participation in the institutional building provided there is an enabling environment created for the FPC ecosystem. And for the overall development of FPC ecosystem, two approaches are needed: firstly institution building through collectivisation should be done in a more bottom-up approach and secondly there is need of enabling environment to be developed to tackle the challenges of collective action. In order to identify and measure the institutions the approach should shift from rules-in-form (which are formalized into rules/guidelines/conduct) to rules-in-use.

It is important to note that the members of a group will work towards a collective interest only in case of external force and distinct incentives. Otherwise even with multiple models and approaches any such institution build on collective action would collapse. The various models of institution building in the Indian context have largely failed to sustain and fulfil its objectives. The building has been there (read visible) but the institution is missing, this phenomena is also known as ‘invisibility of institutions’.

12 Appendix A

List of details of FPC consortium

Sr No	Consortium name	Address	Contact details
1	GUJPRO Agribusiness Consortium Producer Company Limited	Gujpro, Development Support Centre Marutinandan Villa, 1, Bopal - Ghuma Rd, Bopal, Ahmedabad, Gujarat 380058	gujproagri@gmail.com Mr. Kuldip Solanki (CEO) kuldipsw@gmail.com 9998287384
2	MAHA Farmers Producer Company Limited	C/O- Plot No. F/E/78, AIDIP-ADB Office Ground Floor, Market Yard, Gultekdi, Pune, Maharashtra 411037	mahafpc@mahafpc.org Mr. Yogesh Thorat (MD) 8329790416 Mr. Prashant Pawar (CEO) 8380081969
3	Devnandini MahaFPO Federation	18, Range Hill Rd, Yashwant nagar, Pune, Maharashtra 411016	devnandinifarmers007@gmail.com Dr. Pandhare 9922940014
4	Utkal Krushak Samanwaya FPCL	C/O- Sahabhagi Vikash Abhiyan, Ghatikia Main Rd, Ghatikia, Bhubaneswar, Odisha 751003	svaodisha@gmail.com Mr. Jagdish Pradhan (Head: SVA) 9437044008
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