



Analysis of Farmer Producer Organisations in the coconut sector: current scenario, limitations, and policy outlook

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Abstract

Farmer producer organisation is a crucial institutional innovation that aids small holders in overcoming the issues of diseconomies of scale. Nonetheless, prior experience in the coconut sector reveals that the success rates of such organisations are not as high as projected. This article begins by exploring the relevance of FPOs in the current agrarian context and gives a brief account of the evolution of such organisations in the coconut sector. The study also highlights the points for intervention and provides a critical analysis of the significance and justification for FPOs in the sector. It also includes the challenges and actionable strategies in a ready reckoner mode. The primary motivation for the formation of producer organisations in the coconut sector is to organise unorganized coconut farmers through collectives in order to promote their socioeconomic growth. The success of an FPO is heavily dependent on having a solid business plan, and scope for scalability. Inadequate working capital, including grants and credit, is a major limitation for the majority of FPOs. In this setting, it is critical to obtain bank loans at low interest rates. The development of a well recognised and valued brand is critical for the FPO's viability. Lack of professional leadership has a negative impact on FPOs in the coconut sector, and many have gone out of business as a result. To assist them, target based capacity-building programme to inculcate leadership attributes among FPO representatives should be conducted on a regular basis. Only a few FPOs in the coconut industry have looked into the prospect of gaining premium pricing through certification techniques and product traceability. This is due to a lack of both capacity and awareness. This problem must be addressed with ultimate priority. The FPOs must be trained to be self-sufficient and weaned off external assistance in a short period of time after the initiation. Therefore, FPOs should focus on increasing productivity per unit of land and shifting their current production focus to market-oriented output.

Keywords: FPOs, coconut sector, policy issues, strategies

Introduction

Small and marginal farmers in India have been vulnerable to risks in agricultural production. Several organisational prototypes are emerging to integrate them into the value chain with the objective of enhancing incomes and reducing transaction costs. Among these are farmer-producer organisations (FPOs) (Bikkina *et al.*, 2017). An FPO can be a producer company, a cooperative society, or any other legal form that provides for the sharing of benefits among the members. Farmer producer companies form a sub-section of producer companies, where the members are farmers. The legal sanctity of these organisations and their institutional acceptability vary widely across nations. However, the evidence

for the beneficial nature of these farmer producer organisations is now widely accepted among policymakers and farmer members alike. The name "farmer-producer company" is an accepted nomenclature in India denoting a producer organisation usually involved in agricultural production, processing, and marketing. The terms used to designate closely related institutions and farmer collectives vary across countries. Farmer-based organisations (FBO), community-based organisations (CBO), farmer collectives (FC), farmer producer companies (FPC), and farmer cooperatives (FC) are some of the names commonly used. Whatever the name, the FPO performs similar functions in the majority of countries. As a new type of farmer collective combining elements of cooperation and

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commercial companies, farmer-producer organisations are being aggressively promoted as a means to address the challenges faced by smallholder producers. The farmer producer organisations essentially act as an interface between the smallholder and the external world, wherein they overcome the problems of an unorganised work culture and restricted access to the market and resources by providing adequate market access, bargaining power, and better prices (Nikam *et al.*, 2019). It is argued that by acting collectively, smallholders can cope more effectively with marketing challenges, leading to improved livelihoods (Markelova *et al.*, 2009). These farmer collectives were designed to address the constraints faced by smallholder producers, which arose from both the nature of agricultural production and the size of their holding. Some of the constraints that are of specific significance to small farmers include: 1) structural challenges that act as a barrier between farmers and the market, hindering their growth and market viability; 2) poor market infrastructure, non-availability of credit from formal sources, market information asymmetries, inefficiencies of factor markets and output markets, etc.; 3) lower bargaining power and holding capacity arising from insignificant individual production volumes and the disaggregate nature of agricultural production; and 4) higher input costs arising from purchase of inputs in the retail market, low volume transactions, inability to forecast requirements, and lack of technical expertise in input management and decision making.

Some of the major drawbacks of small farmer collectives arise from capital constraints, corruption, free rider problems, political interference, and a lack of autonomy (Singh and

Singh, 2013). As a viable policy intervention for strengthening and revitalising farmer collective organizations, it is now considered that a change in the organisational and operational environment of farmer collectives more in line with professionally run companies will have a highly transformative effect. The enhanced freedom, the unshackling of collective power, and stakeholder involvement in professionally run business operations were expected to make farmer collectives profitable business entities in a competitive market.

A glimpse of evolution of FPOs in the coconut sector

In India, coconuts contributed about Rs 10,707 crore in crop output in 2021–22, and the coconut industry directly or indirectly employs about 12 million people. In the coastal regions of Kerala, Tamil Nadu, Karnataka, and Andhra Pradesh, coconut is a major plantation crop. These top-four producers accounted for 90 per cent of total production and about 89.5 per cent of total production acreage in the country in the year 2021–22 (Table 1). Other important coconut producing states in the country include West Bengal, Odisha, Gujarat, Maharashtra, Assam, and Bihar, which account for nearly eight per cent of production. Among the four major coconut-growing states, Andhra Pradesh had the highest productivity (15964 nuts/ha), followed by Tamil Nadu with 11413 nuts per hectare. The productivity of the crops varies widely among the coconut growing zones. Kerala, which accounts for the largest share in production in the country, had an average productivity of 7215 nuts per hectare in 2021–22, which is lower than the all-India yield of 8966 nuts per hectare.

Table 1. State-wise Statistics: Coconut

State	Area ('000 Ha)	Production (million nuts)	Productivity (Nuts/ha)	% share (Area)%	Share (Production)
Andhra Pradesh	106	1689	15964	4.9	8.7
Karnataka	604	5178	8569	28.1	26.8
Kerala	765	5523	7215	35.5	28.6
Maharashtra	30	238	7863	1.4	1.2
Odisha	53	398	7527	2.5	2.1
Tamil Nadu	446	5092	11413	20.7	26.4
West Bengal	33	406	12447	1.5	2.1
Others	116	787	----	5.4	4.1
Total	2154	19310	8966	100.0	100.0

Source: Coconut Development Board, 2023

Presently, coconut growers are more exposed to economic risks and uncertainties owing to the high degree of price fluctuations. Organizing the unorganised coconut sector through farmer’s collectives was one of the important activities of the coconut development board (CDB) during the twelfth five-year plan. Since then, CDB has been facilitating the formation and handholding of FPOs in the coconut sector. The primary objective of mobilising farmers into member-owned producer organisations is to enhance production, productivity, promote economically desirable processing, marketing, and increase the profitability of coconut farming in the country. Coconut farmers are organised at the grass-roots level into small, informal neighbourhood groups known as coconut producer societies (CPS), with 10-12 CPS federated into federations at the middle level and 10-12 federations forming producer companies at the top level. Like a co-operative system, three tier coconut farmers' collectives were formed, which would be supported under the programme to form associations relevant to their context, including confederating them into FPOs for improved input and output market access as well as negotiating power. The CDB initiated coconut producers’ collectives at grass-roots level (CPS) in 2009-10 in Kerala, and 112 CPS formed during the year. Subsequently, CPS formation was scaled up to all districts in Kerala. In 2012–13, scaling up of CPS formation in Tamil Nadu, Karnataka, and Andhra Pradesh and integration of CPS to form CPF in Kerala were started. The formation of coconut producer companies was also initiated in 2013–14. So far, 9785 CPSs, 747 CPFs, and 67 CPCs have been registered across the country. The progress of CPS, CPF, and CPC formation so far is summarised in Table 2 below.

Table 2. Coconut Producers' Society, Federation and Company

Sl No	State	No. of CPS	No. of CPF	No. of CPC
1	Kerala	7233	467	29
2	Tamil Nadu	698	73	20
3	Karnataka	401	125	16
4	Andhra Pradesh	1157	82	9
5	West Bengal	218	0	0
6	Odisha	40	0	0
7	Assam	29	0	0
8	Gujarat	14	0	0
9	Maharashtra	1	0	0
10	Total	9791	747	74

Source: Coconut Development Board, 2024

A quick depiction of the evolution of three-tier farmer collectives in the coconut sector from 2011 to 2022 is provided in Fig. 1. The formation of producer societies reached its peak during 2015, and thereafter, progress has been slow. It warrants further critical analysis of the reasons for the slow growth phase in the recent period.

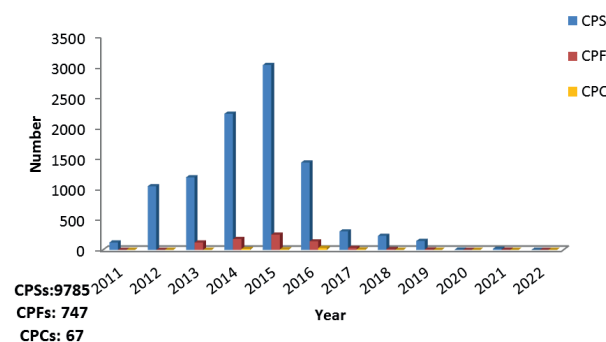


Fig. 1. Evolution of three tier FPOs in coconut sector during 2011-2022

Current organisational framework of FPOs in the coconut sector

In the coconut sector, a three-tiered system of farmer collectives federated at the secondary and tertiary levels was envisioned. CPS forms the foundation for the three-tiered network of farmer collectives conceived by the CDB. Grass-roots collectives, consisting of 40–100 coconut farmers, formed the basic unit of aggregation. The rationale behind this was that small groups would increase cohesion and synergy. Any farmer who has a minimum of 10 bearing coconut palms is eligible to become a member of the farmer collective. These farmers cultivating in contiguous areas will have a minimum of 400–6000 coconut palms, which provide them with an adequate marketable surplus to initiate a marketing or processing endeavour. The farmer collectives were registered under the Indian Societies Act, 1860, or the Travancore Cochin Literary, Scientific, and Charitable Societies Act, 1955, and were named Coconut Producer Societies (CPS). The CDB developed a common bylaw for the CPS. The objective is the socioeconomic development of the farmers through productivity improvement, cost reduction, efficient aggregation, marketing and processing for value addition, and by-product utilization. The CPS functions on the concept of inclusive growth. The group is formed on a basis of a knowledge based, farmer centric, non-subsidized approach and advocates a group

approach in crop production, post-harvest handling, processing, value addition, and marketing.

The CPS are further federated to form Coconut Producers Federations (CPF) by integrating 15–25 CPS. The federation will have around one lakh coconut palms in its area of operation, which will provide adequate raw material for the initiation of a coconut processing unit. The federations can also undertake efficient by-product utilisation for increased returns. On the production front, CPFs can embark on R&D activities in coconut farming with the association of research institutes, thereby enabling the demonstration of already developed technology and also the development of innovative technology in a participatory and need based manner. Federations can aggregate coconut for collective marketing, either for the domestic market or export, and also for processing activities. Monitoring the activities of the member CPS and engineering the formation of new CPS in potential areas was also one of the key responsibilities of the CPF. Enterprises like coconut chip production, tender coconut parlours, minimal processing of tender coconut, copra production, etc. were the activities commonly undertaken by CPF. About 8–10 CPFs would join together to form a CPC. A CPC would consist of around 10,00,000 yielding palms. This company would be registered under Section 581B of Indian Companies Act of 1956. The Producer Company is wholly and fully owned by the farmers. Sometimes, when CPSs have a large number of members and almost one lakh coconut palms, they are considered equivalent to CPFs, and ten such CPSs may come together to form a CPC.

Aside from the three-tiered FPO structure set up by CDB, other types of farmer collectives work in the coconut sector. The most visible of these are the collectives supported by the Keragramam project, which is being run by the Kerala government. The state department of agriculture development and farmers' welfare, government of Kerala, has been implementing Keragramam, a project for integrated management of coconut gardens on a cluster basis, since 2012. The project is implemented in an area of 100 ha for a consecutive period of three years in each of the selected coconut growing gramapanchayats in the state. Every year, the project is extended to new gramapanchayats. During the year 2022–23, it is proposed to implement the Keragramam project in 100 grama

panchayats, thus covering a total area of 10,000 ha. Financial incentives are provided to encourage the timely adoption of scientific crop management practices and the installation of irrigation facilities, including micro-irrigation. Under the project, assistance is also provided for purchasing coconut climbing devices and establishing organic manure production units. Viable proposals by farmer clusters, SHGs, NGOs, and FPOs to start enterprises on coconut processing and value addition will also be supported under the project. A compact area approach with an extent of 100 ha is adopted for the implementation of the Keragramam project. All small and marginal farmers coming under the selected project area will be included as beneficiaries of the project based on the suitability of the coconut gardens, irrespective of their land holding size. Clusters formed at panchayat level should have a technical resource group for monitoring the implementation of the different components of the project, with the grama panchayat president as the chairperson and the agricultural officer as the convener. The resource group will have field level functionaries from the department of agriculture, representatives of Kerala Agricultural University (KAU), CDB, and scientists from research stations as members.

Leverage points of policy interventions by the state machinery

FPOs provide a slew of advantages for governments as a policy initiative to assist the farming community. It is in the interest of a benevolent government to develop a collaborative partnership with the FPO sector. Encouraging the establishment and successful development of FPOs should be a priority for governments wishing to promote sustainable development of the coconut sector since stakeholder involvement through FPOs in nurturing the coconut economy will ensure the incorporation of sustainability principles in all activities. The establishment of FPOs strengthens market forces and enhances better and fair access to markets for all stakeholders. The enhanced market efficiency, while enhancing government revenues, is helpful for optimising resource allocation across crops and commodities. The establishment of FPOs can reduce the need for government expenditure and involvement in the provision of support services, especially extension services and other technical guidance services. This can free up government resources for other priority sectors in

the country while providing services to farmers at a lower cost and with greater effectiveness than government is often capable of. Governments should encourage the development of FPOs, as they can improve the process of policy making by proposing supportive policies and providing coherent assessments of policy impacts from the perspectives of actual stakeholders. During the last few decades, a wide range of FPOs have emerged with the support of state and central governments, and their number is on the rise. A central sector scheme for the formation and promotion of 10,000 FPOs is currently being implemented by the Ministry of Agriculture and Farmers' Welfare, under which financial assistance and other incentives are provided to FPOs.

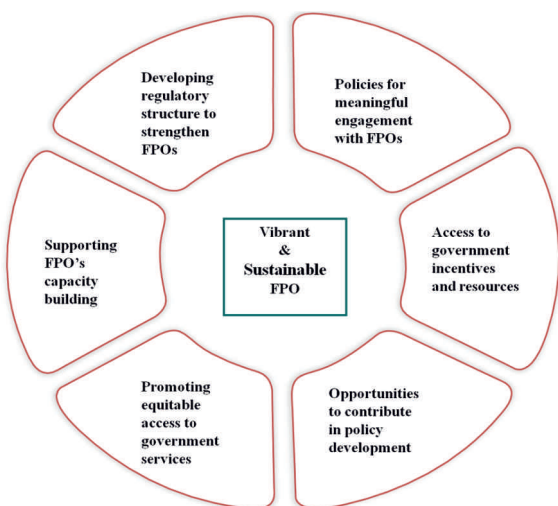


Fig. 2. Depiction of leverage points of policy interventions by the state machinery

Essentially, the state apparatus can intervene in six crucial areas to push farmer collectives toward thriving and sustainable farmer producer organisations (Fig 2). First and foremost, it is pertinent to frame an appropriate regulatory structure that provides provisions to strengthen the FPOs. Besides, it is also crucial to lay out and implement policies for cordial and meaningful engagement with the FPOs. In tune with this, it is imperative to ensure the access of FPOs to the incentives and resources provided by the government for specific purposes of collectivization. Along with this, the government machinery should be committed to ensuring equitable access to the services provided to farmer collectives. The assured capacity building

programmes at various levels will empower the FPOs to contribute in policy decisions and policy development for the wellbeing of the organization.

Strategies to ensure viability to FPO initiatives

FPO is a currently relevant institutional innovation that helps to overcome the challenges of diseconomies of scale suffered by smallholders. Conceptually, such collectives are intended to inculcate the advantages of sound business principles followed by companies. Therefore, unlike cooperatives, FPOs have a rare blend of cooperative spirit with a business orientation. It has the potential to act as a centre for value addition and raise farmers' income. The bottom line for FPOs is to have a sound business plan. Having said that, previous experience with FPOs in the coconut sector suggests that success rates are not as high as it was expected (Thamban *et al.*, 2020). The performance of FPOs can be improved through concerted efforts by all the stakeholders.



Fig. 3. Illustration of strategies to ensure viabilities of FPOs

Having a sound techno-economic analysis and business plan before venturing into operation is the first prerequisite. The FPOs need to adopt advanced technology that is available in the market at an affordable price. Other considerations, such as servicing (in the case of machinery), continuous availability of inputs (seed, feed, agrochemicals, etc.), and the risk associated with the technology, must be factored in at this stage. These factors need to be factored into the economic analysis, using relevant economic principles. One important criterion is that it generates a positive net income at

various levels of market risk. Therefore, the success of an FPO would depend largely on having a sound business plan, including its scalability. The business plan should factor in market demand and supply conditions, potential sales volume, inventory management, aggregation issues, processing and value addition, packaging, certification, regulatory conditions, waste management and environmental clearance, credit availability, technology, etc. A value chain approach wherein the consumer and markets are considered the prime drivers needs to be adopted while formulating FPO's business plan.

A serious constraint faced by most of the FPOs is inadequate funding, including grants and credit. Once the government support is withdrawn after a period of three years, the FPOs are in a precarious financial situation, and the banks might not be interested in providing credit. The FPOs require credit for both investment and operational requirements. In this context, it is important to raise loans from banks at reduced interest rates. A state-level effort is needed to mobilise credit for FPOs. The credit-deposit ratio of commercial banks in Kerala is quite low compared to several other states.

Developing a brand that is widely recognised and appreciated is crucial as far as the viability of the FPO is concerned. A brand development requires adherence to strict quality norms and should have a strategy for market penetration, including advertising.

It is necessary to impart skill through training in order to have products that meet food quality and safety requirements. The workers are to be trained on value addition and processing so as to have products that are more widely accepted in the market. The services of research and training institutions are to be leveraged towards this. The scientific protocol needs to be adhered to in this regard. Providing managerial training to the key persons associated with FPOs can help to improve their functioning, particularly in the realms of marketing, financial management, labour management, supply chain management, processing cum value addition, and transportation. The key personnel are also to be trained in the basic principles of accounting and book-keeping.

A plan for diversification is another crucial aspect to be considered. As of today, those FPOs

with diversified activities are better in terms of several indicators, compared to those with a single activity. A broad-based strategy helps to balance risks and better utilise labor, reducing slack. The establishment of common facilitation centers for specific activities such as packaging, quality testing, and labelling can assist in lowering unit costs. It is also pertinent to develop mechanisms for absorbing risks in view of market failure, at a national or regional level. This would provide confidence to develop FPOs and take up business activities.

An FPO with a well-researched business plan has a better chance of survival than the counterfactual because it provides for adequate capitalisation and increased member participation.

Challenges and policy options

- Lack of working capital is a major problem experienced by FPOs in the coconut sector. The low level of awareness among financial institutions about the functional and operational structure of FPOs makes them reluctant to provide term loans and working capital loans to producer companies. Therefore, the creation of awareness among financial institutions needs to be accorded priority. The provision of interest free revolving funds or loans needs to be considered to support FPOs. A corpus fund may be raised with government support to generate sufficient working capital for coconut FPOs.
- Though agricultural income is exempt from income tax, the same benefit is not available to farmer-owned companies. FPOs in the coconut sector need to get the same tax treatment as those in agriculture.
- Lack of professional leadership adversely affects the FPOs in the coconut sector, and many of the FPOs have become defunct due to this problem. Capacity building programmes to nurture leadership traits among FPO representatives are to be conducted regularly to support them.
- Many FPOs failed to meet their objectives due to a lack of administrative capacity, which resulted in poor management of record keeping and accounting, which led to issues with accountability and transparency. These factors also stand in the way of their accessing finance from banks.

- Only a few FPOs in the coconut sector have investigated the possibility of obtaining premium pricing through certification strategies and providing product traceability. This results both from a lack of capacity and a lack of awareness. This situation needs to be addressed.
- The role of professional extension services is underutilised during the initial stages of formation of FPOs. These services can be used to locate farming communities, raise awareness, mobilise communities, organise community meetings through local leaders, form social capital, facilitate core group formation, and build farmer capacity, among other things.
- A major difficulty for sustaining activities, as perceived by FPOs in the coconut sector, is that they do not get enough support from government agencies, except for the formation of FPOs and initial activities. The fact is that many FPOs are dependent on grant-in-aid and subsidies provided through various government and non-governmental sources. This undermines an assessment of their actual commercial viability and makes them fragile as an institution. The FPOs need to be trained to become self-sufficient and weaned off external support within a short span of time. However, FPOs need support for their sustenance and, subsequently, for diversifying/strengthening their activities, for which incentives can be provided based on their performance and achievements.
- Most of the FPOs in operation focus on increasing the output volumes alone, with a hazy focus on profitability. The FPOs should focus on productivity enhancement per unit of land and reorient their present focus on production to a focus on market-oriented production. The focus on productivity and profitability can be embedded in crop planning, rotation, shifting patterns of crops, and the development of value chains to reduce transaction costs.
- The majority of FPOs in the coconut sector experience various constraints in marketing and also mostly fail in brand building, which adversely affects their performance and viability. Hence, it is necessary to facilitate the formation of a consortium of FPOs in the coconut sector and common branding for the coconut value-added products produced and marketed by coconut FPOs.
- The network of CPS/CPFs may be utilised by the government for the procurement of coconut from coconut growers and the primary processing of nuts, facilitated by the formation of a nodal agency for the collection of copra, and a central facility for safe storage and warehouses. The rate of fees charged for technology transfer related to value added coconut products and machinery and other services provided to FPOs in the coconut sector need to be made more affordable.
- Local self-governments (LSGs) can play an important role in supporting FPOs in the coconut sector by involving them in the implementation of the decentralised planning initiative. However, most of the LSGs do not realise the potential of linking decentralised planning in the agriculture sector with FPOs. They recommended that specific norms be fixed and necessary guidelines be issued to LSGs for supporting FPOs through decentralised planning. Interventions on the production and supply of high-quality coconut seedlings, customised fertilizers, organic agriculture inputs, interventions to support growers by making skilled labor, particularly palm climbers, and farm equipment and machinery available, and so on, can all be included in decentralised planning and implemented by FPOs.

Table 3. Policy issues, strategies and outcome-A ready reckoner

Issue confronted	Strategies/ solutions	Result/Outcome
Scarce working capital	<ul style="list-style-type: none"> ● Creation of awareness among financial institutions ● Provision of interest free revolving funds ● Raising corpus fund with government support 	Adequate working capital
Non-exemption of Income Tax	<ul style="list-style-type: none"> ● Equal tax treatment on par with agriculture ● Support from the State machinery 	Tax relaxed FPO
Lack of professional leadership	<ul style="list-style-type: none"> ● Capacity building programmes ● Focused selection (outside experts) 	Efficient and focused leadership
Lack of constant institutional support	<ul style="list-style-type: none"> ● Learn to be self sufficient ● Targeted hand holding 	Self sufficient FPO
Unilateral Focus on output volume	<ul style="list-style-type: none"> ● focus on productivity enhancement ● focus on market-oriented production ● Development on value chains 	Sustaining profitability and robust value chains
Lack of brand	<ul style="list-style-type: none"> ● Formation of a consortium of FPOs ● Developing common brand (for coconut products) 	Acceptable common brand
Minimal role in decentralized planning	<ul style="list-style-type: none"> ● Synergy with LSGs ● Coevolving planning process 	Redefined role in grass root level decision making

Conclusions

Collectivization of producers, especially small and marginal farmers, into farmer producer organisations has emerged as one of the most effective means of addressing the challenges faced by the agriculture sector. Though India has witnessed the emergence and establishment of numerous farmer collectives in the coconut sector, policy incentives to support these FPOs with a specific focus on facilitating improved access to investments, technology inputs, and markets need to be implemented. The network of FPOs in the coconut sector and the available evidence clearly indicate the importance of handholding institutional services in development of FPOs. It is obvious that, the bottom line of any FPO is the capability of continuous profit

generation. Nevertheless, in the case of FPOs in coconuts, it is pertinent to consider other parameters besides profit. Evaluating FPOs solely based on their income or profit fails to take several purposes of FPO formation into consideration. FPOs are intended to protect farmers in risky situations. For example, when market prices are quite low, the FPOs procure at a price that is higher than market prices. While this acts as a solace to farmers, it may not help raise profits. In this context, specific support from the government could turn out to be of great economic significance. Along with this, smallholder orientation and democratisation of FPOs: The volume of produce by a small farmer is quite low. It is found that the running of an FPO is overly influenced by the dominant member (in terms of production, political orientation, etc.), rendering the majority to

passive members. Therefore, conscious efforts are to be taken to keep the FPOs democratic so that the interests of most of the members are taken care of. Further, the technologies need to be suitable to the economic conditions and farming practices of small holders. The organizational, financial and commercial sustainability of FPOs can be further enhanced by leveraging the strengths and addressing the constraints through pragmatic policies, and there is a need for government support to create a FPO nurturing ecosystem for revitalising the FPOs in coconut sector.

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