

Value Chain in Extension: Establishing Linkage through Farmers' Producer Organization(FPOs)

Madhumita jena, Lakhan Lal Meena, Lata Mallick, Mayuri Sing Sardar

¹ Krishi Vigyan Kendra, Nayagarh, OUAT, Bhubaneswar, Odisha

² Krishi Vigyan Kendra, Nuapada OUAT, Bhubaneswar, Odisha

³ Krishi Vigyan Kendra, Sambalpur OUAT, Bhubaneswar, Odisha

⁴ Krishi Vigyan Kendra, Boudh OUAT, Bhubaneswar, Odisha

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Concept of “Agri- Value Chain” covers full range of activities and participants involved in moving agricultural products from farm gate to the consumer’s table. Agriculture value chain is a series of value-adding processes that go from manufacturing to consumption, including processing and commercialization. For the processes to establish a viable chain, each stakeholder or process has to be connected to the next.

i. Understanding Value Chain

Agricultural value chains are complex networks that cover a product's whole path from the farm where it is produced to the ultimate consumer. They show a series of related actions and procedures involving different parties, assets, and infrastructure. A value chain's objective is to maximise value addition at every phase, converting unmarketable agricultural materials into goods that can be sold while reducing waste and inefficiencies.

Components of Agricultural Value Chains:

Input Supply: In this first phase, farmers receive inputs like machinery, fertiliser, seeds, and insecticides. Productivity and product quality are strongly impacted by the availability of high-quality inputs.

Production: The production phase, in which farmers grow crops or raise livestock, is the hub of the value chain. This stage includes raising animals, cultivating them, and taking care of them to ensure their health and growth.

Harvesting: The harvesting stage starts when the livestock or crops are ripe. Appropriate timing and techniques are essential to preserve product quality and avoid losses.

Post-harvest handling: Products must be handled carefully after harvesting in order to maintain their quality and freshness. This entails tasks including packing, grading, cleaning, and sorting.

Processing: During the processing stage, agricultural raw materials are transformed into items with value added. This phase involves canning, refining, milling, and other operations that extend product shelf life and appeal to consumers.



Distribution and transportation: Moving goods from processing facilities to wholesalers, retailers, and finally customers is the distribution step. Having effective logistics is essential to preventing spoiling and preserving product integrity.

Retail: This completes the chain prior to the consumers. Retailers play a significant role in product presentation, pricing, and marketing.

Consumption: The final step in the value chain is for enterprises or individuals to consume the items. The entire value chain is driven by consumer preferences and needs, which also shape product offerings and production decisions.

ii. *Importance of Efficient Value Chains for Agricultural Development*

Efficient agricultural value chains play a pivotal role in driving agricultural development and overall economic growth. Several key reasons highlight their importance:

Enhanced Productivity: Productivity is raised by ensuring that resources are used effectively through an optimized value chain. Farmers can access high-quality inputs, advanced techniques, and timely information to improve their yields.

Improved Income for Stakeholders Efficiency throughout the value chain frequently results in increased earnings for all stakeholders, including farmers, processors, and retailers. This helps to alleviate poverty and improves rural areas.

Market Access: Value chains open up access to more domestic and foreign markets. Producers and farmers can interact with customers much beyond their local areas.

Quality Control and Traceability Improved quality control procedures made possible by efficient value chains guarantee that goods fulfil predetermined requirements. Accountability for quality issues and the identification of product sources are made possible by traceability measures.

Innovation and Technology Adoption Value chains help new information, techniques, and technologies spread throughout the agriculture industry. This quickens the uptake of innovation, resulting in competitiveness and sustainable growth.

Employment Generation: Value chains generate employment at all levels, from manufacturing to distribution, as they grow, boosting employment in both urban and rural areas

iii. *Challenges in Traditional Agricultural Value Chain*

While agricultural value chains hold immense promise, traditional systems often face several challenges that hinder their effectiveness:

I. **Limited Access to Resources:** Smallholder farmers often lack access to quality inputs, credit, and modern technology, inhibiting their productivity and ability to engage in value chains.

II. **Fragmentation:** Traditional value chains can be fragmented, with poor coordination among different stages. This results in inefficiencies, longer lead times, and increased costs.



III. **Market Information Gap:** Farmers might lack real-time market information, leading to uncertain pricing and difficulty in making informed decisions regarding crop choices and sales timing.

IV. **Infrastructure Deficits:** Inadequate transportation, storage facilities, and post-harvest infrastructure can result in product losses, reduced quality, and limited access to markets.

V. **Inequitable Benefit Sharing:** Some value chains suffer from imbalanced distribution of benefits, where middlemen capture a significant share of profits, leaving farmers with limited return

iv. **Agriculture -Value Chain Analysis**

Assessment of the actors and factors influencing the performance of a sector/ commodity, and relationships among participants to identify the driving constraints to increased efficiency, productivity and competitiveness of farming and how these constraints can be overcome.

Value chain analysis, which can employ a qualitative or quantitative method, aids in mapping the value chain of a particular product including multiple value chain participants. Produce gets value in the form of price markup as it travels from one chain actor to another. As a product moves along the value chain, it is actually transacted by a number of chain actors, including farmers, traders, processors, transporters, wholesalers, retailers, and end consumers. The value chain framework is helpful in recognising and comprehending critical elements to develop competitive strengths and core competencies in the marketplace. It has been employed as a potent analytical tool for strategic planning. The model also shows how the many activities in the value chain work together to provide value for the customer in the end.

Why

- Reduction of wastage
- Ensuring food safety
- Preserving freshness
- Decreasing consumer prices
- Improving farmer prices and incomes

Benefits

- Reduce the use of intermediaries in the chain
- Strengthen value-added activities
- Better technology and inputs
- Farm gate procurement
- Upgraded infrastructure (such as cold chains)
- Improved price opportunities
- Demand-driven production
- Procurement for food processing and expo.

v. **Government initiations for promotion of agri-marketing**

The Government has been working continuously and has taken several concrete steps to link the farmers with the markets with the aim to help the farmers in trading of their food grain. In order to optimize the use of scarce resources and mitigate the uncertainty in price and marketing, the Government has implemented

- ✓ **National Agriculture Market (e-NAM)** scheme an online virtual trading platform to provide farmers with opportunity for transparent price discovery for remunerative prices for their produce through competitive online bidding system.
- ✓ **Market Research and Information Network (MRIN)** Scheme covering 3356 wholesale mandies across the country linked to Agmarknet portal, wherein Agricultural Produce Market Committees (APMCs) markets are reporting data on mandi arrivals and prices of their traded agricultural commodities on daily basis. The farmers have free access to the Agmarknet portal for getting market price information easily.
- ✓ **Price Support Scheme (PSS)** for procurement of pulses, oilseeds
- ✓ **Contract farming** can be defined as agricultural production carried out according to an agreement between a buyer and farmers, which establishes conditions for the production and marketing of a farm product or products. Typically, the farmer agrees to provide agreed quantities of a specific agricultural product.
- ✓ **Market led production** Enabling farmers to get optimum returns out of the enterprise
- ✓ The Government is also providing marketing facilities to famers under the schemes of Paramparagat Krishi Vikas Yojana (**PKVY**) and Mission Organic Value Chain Development for North Eastern Region (**MOVCDNER**).
- ✓ **Farmer Producer Organizations (FPOs)** help increase farmers' income by providing end-to-end services and support, fostering economies of scale, and promoting collective bargaining power

Source: Press Information Bureau, Government of India, Ministry of Agriculture & Farmers Welfare, 2020

vi. **Farmers' Producer Organizations (FPOs)**

FPOs are emerging as the potential partners to build resilient agri value chains as well as unlock greater value for the farmers. FPOs focus on the entire supply chain, and this is what distinguishes them from other aggregation models. The multitude of benefits offered by the FPO model include improving farming practices through input market linkages and agri advisory; access to better direct marketing opportunities through output market linkages; value addition at the farmer level thereby reducing wastage of fresh produce, and diversifying income opportunities for the farmers; greater technology uptake by providing scale for technology deployment; awareness and adoption of food safety practices among the farmers; enablement of traceability and certification for niche products that improves business opportunities. In addition, from a broader socio-economic perspective, FPOs can promote women farmers and entrepreneurs that leads to greater economic, and social empowerment and is also an important grassroot organizations that can link livelihood, food, and nutrition security

vii. **Need for Farmers' Producer Organizations**

- Small producers do not have the volume individually (both inputs and produce) to get the benefit of economies of scale.
- Agricultural marketing follows a long chain of intermediaries who very often work non-transparently leading to the situation where the producer receives only a small part of the value that the ultimate consumer pays. Through aggregation, the primary producers can avail for better bargaining power both for produce and inputs buying.

viii. **Essentials of Farmers' Producer Organizations**

- Formed by a group of producers for either farm or non-farm activities
- A registered body and a legal entity
- Producers are shareholders in the organization
- Deals with business activities related to the primary produce/product.
- Works for the benefit of the member producers.
- A part of the profit is shared amongst the producers.
- Rest of the surplus added to its owned funds for business expansion.

ix. **Market Linkage by Farmers' Producer Organizations**



- input aggregation
- Agri-Services
- Financial Services
- Capacity building
- Quality production • Networking
- Output marketing
- Value Addition
- Contract Farming
- Brand Promotion
- Retailing

x. some of the key policy that enables Farmers’ Producer Organizations

- FPO formation should be focussed on addressing challenges faced by the farmers that vary across geographies and value chains.
- Structured feasibility studies should be undertaken to assess the need for FPOs. Monitoring the progress of FPOs will be important in sharing experiences and lessons for strengthening the evolving ecosystem
- The current ecosystem needs to be strengthened through better management practices and business orientation of the FPOs
- There is a need for continuous engagement with FPOs, recognizing the diverse needs of each organization and providing tailored solutions to address them effectively.

Enhancing FPO capabilities, strengthening market linkages, improving access to advanced technologies, familiarizing and aligning with government schemes to empower small farmers and build resilient agricultural value chains.

xi. Key Components of FPO

Market Linkages	FPO Capabilities	Policies & Govt. Schemes	Technology Uptake	Digitalization
Direct procurement by private buyers	FPO Management	Familiarizing and aligning with government schemes	Connect with agrifood tech startups	Application based ERP Solution
E-marketplace for input/output	Good Agricultural Practices (GAP)	Information about relevant schemes addressing issues and queries related to the schemes	Facilitate pilot interventions	Digital Advisory
Linkage to private digital platforms	Post-harvest management		Promote technology uptake	
Linkage to e-NAM and mandis	Primary processing & value addition			
	Branding & marketing			

xii. Case study of Rankadeulu Farmer’ Producer Company of Ranpur block of Nayagarah district of Odisha

Rankadeuli Farmers Producer Company Limited a farmer owned and managed Producer Company registered in Company Act in 2018. The company office is situated in village Rankadeuli of block Ranapur of Nayagarh district. The collective action in the form of FPO allows farmers to utilise economies of scale to lower their cost and improve their competitiveness as well as strengthen their marketing capacity and helping them to manage risks.



Brief Profile of Rankadeuli FPO

S.N	Particulars	Description
1.	Name of the FPO	Rankadeuli Farmers Producer Company Ltd.
2.	Address	House No-042,Baunsagada,Lunisahi,Ranpur, Ranpur,Nayagarh,Orissa,India,752026
3.	Registered under act	2013(18 of 2013)and rule 18 of the Companies(Incorporation) Rules,2014
4.	Registration No	U01110OR2018PTC029369
5.	Date of registration/Formation	19/07/2018
6.	Number of shareholders	508
7.	No of villages covered by FPO	12
8.	Total No of Household	380
9.	Support sought from any agency (name of the agency)	I-Concept initiatives

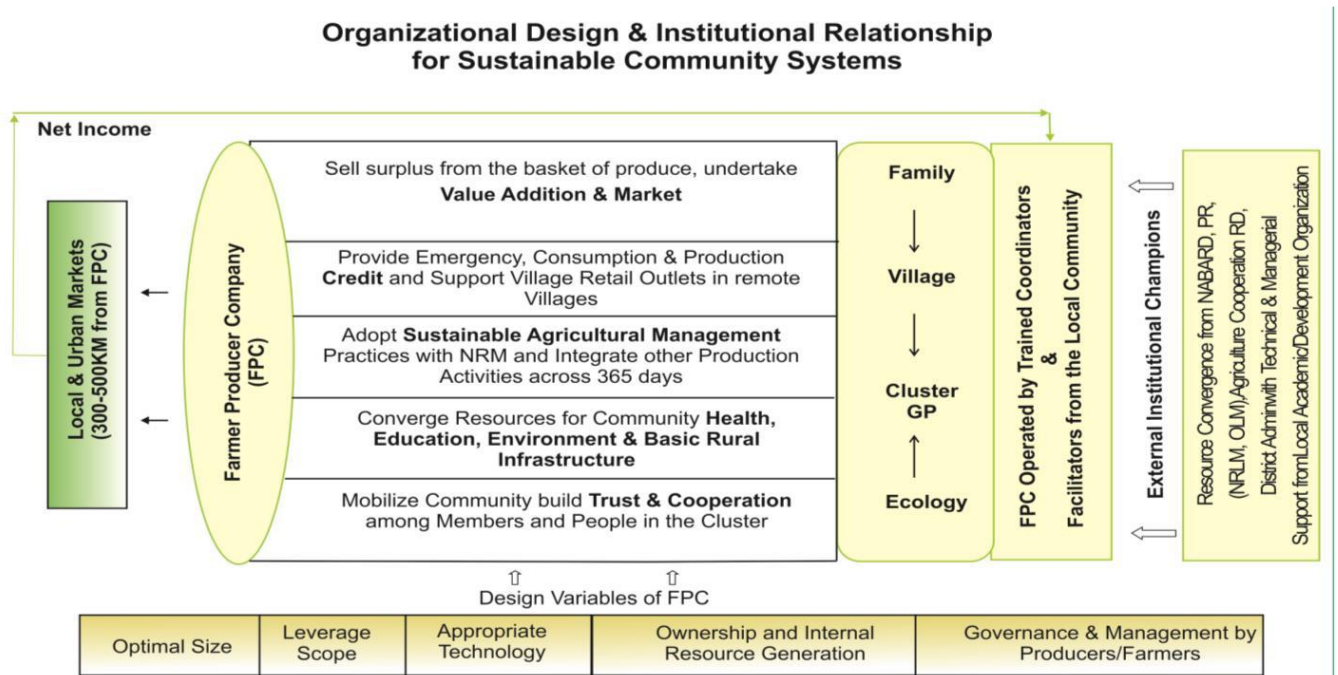
SWOT Analysis of FPO

Strength	Weakness
<ul style="list-style-type: none"> ➤ Producer members have faith on concept of Producer company ➤ Committed leadership ➤ Membership driven organisation ➤ Support of strong support service organisation i-Concept Initiatives ➤ Strong market linkages for Agri-commodities ➤ Having written constitution to guide operations ➤ Have well defined organisation structure ➤ Adequate experienced farmers and resource base in the operational villages ➤ Exposed to training and management of the institution by POPI ➤ Support of i-Concept Initiatives till 2024 for promotion of livelihood of small and marginal farmers ➤ Formation of women PG and negotiating with government to leverage resources 	<ul style="list-style-type: none"> ➤ Lack of resource base among the small and marginal farmers ➤ Female members are shy and not taking pro active role in the internal management ➤ Lack of office and store space for the FPO ➤ Understanding among the farmers are not same, some of the farmers think it is a another scheme to get money from government ➤ Non availability of working capital support ➤ Limited financial resources ➤ Lack of own assets ➤ Inadequate capacity to afford skilled human resources ➤ Lack of skills in leadership ➤ Low practical experience in running such organisation ➤ Low investment level of members(equity)
Opportunity	Threat
<ul style="list-style-type: none"> ➤ Vast untapped membership ➤ Scope of value addition ➤ Diversification to more remunerative crops & activities ➤ Internal & external financial access ➤ Equipment hiring services ➤ Scope for activity diversification (Service provider role in insurance, credit, training and development etc) 	<ul style="list-style-type: none"> ➤ Inadequate support of financial institutions and other Govt agency ➤ Lack of policy for promotion of business by FPO ➤ Frequently changes in policies ➤ Poor infrastructure ➤ High level of insecurity ➤ Interference of middle man ➤ Sustainability

Business activities carried out by Rankadeuli FPO:

- Promotion of Paddy (Black & Aromatic)
- Organic Vegetable Cultivation
- Pulses (Blackgram/Greengram/Horse gram) & Millet Promotion
- Production of Vermi Compost
- Poultry farming
- Oil processing
- Facilitating collective marketing of Surplus Agri. Produce
- Grading, packaging and storage
- Bulk selling of agri-inputs (seeds and other critical inputs)
- Pooling and marketing of organic vegetables and cashewnut

Framework of Sustainability of Farmers' Producer Organization



Activities conducted by Krishi Vigyan Kendra, Nayagarh related to Farmers' Producer Organization (FPO)

1. Organizing Farmers capacity building programme for the shareholders of FPOs relating to production practices, plant protection measure, farm implements for custom hiring, cost reduction technologies, minimal processing, value addition, packaging and storage.
2. Collaborative activities on Awareness campaign of Schedule Caste Sub Plan (SCSP), method demonstration, result demonstration, Diagnostic field visit etc. Training cum exposure visit of FPO shareholders on value addition of mushroom at CAET, OUAT, BBSR.
3. Conduct the demonstration i.e Frontline Demonstration (FLD) and Cluster Frontline demonstrations (CFLD) in coordination with FPO operational areas. Critical input support, technical guidance, field visit and monitoring are carried out at regular interval.
4. FPO activities on Farm mechanization and natural farming were broadcast under DD Kissan.
5. Participate in Annual General Body Meeting (AGM) of FPOs and motivate for shareholder mobilization, equity collection, upscaling business planning and to act as single window delivery system.
6. Management training programme for strengthening and streamlining scalable business activities of for the Board of Directors (BODs) of FPOs



Gramin Bazaar (funded by NARABD) to promote and market processed value-added products of FPO (Spices, Oilseed, cereal & Pulses)



Value added products prepared by shareholders of FPO and Producer groups



Oil processing & pulverizer machinery owned by the FPO



Bulk purchasing of seed material for supporting the shareholders to minimize the production cost



Demonstration on Oilseed in collaboration with FPO operational area



Interaction with the BODs to strengthening & streamline FPOs and development of business plan



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