Sustainable Farmer Producer Organizations for Improved Agricultural Productivity and Farmer Livelihoods

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SAIS INTERNATIONAL DEVELOPMENT Practicum Report, June 2019
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### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>eNAM</td>
<td>Electronic National Agriculture Market</td>
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<td>FPO</td>
<td>Farmer Producer Organization</td>
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<td>GDS</td>
<td>Grameen Development Services</td>
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<td>KCC</td>
<td>Kisan Credit Card</td>
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<tr>
<td>LAPCL</td>
<td>Lehra Agro-Producer Company Ltd.</td>
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<tr>
<td>NGOs</td>
<td>Nongovernmental Organizations</td>
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<td>NABARD</td>
<td>National Bank for Agriculture and Rural Development</td>
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<td>MSP</td>
<td>Minimum Support Price</td>
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<td>NKL</td>
<td>NABKISAN Finance Ltd.</td>
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<td>PACS</td>
<td>Primary Agricultural Credit Societies</td>
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<td>Rs.</td>
<td>Indian Rupees</td>
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<td>RRBs</td>
<td>Regional Rural Banks</td>
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<td>SHGs</td>
<td>Self Help Groups</td>
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<td>SFAC</td>
<td>Small Farmers’ Agri-Business Consortium</td>
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<tr>
<td>SML</td>
<td>Small, Marginal, and Landless</td>
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<tr>
<td>SSKK</td>
<td>Shikshan Ane Samaj Kalyan Kendra</td>
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<td>USD</td>
<td>United States Dollars</td>
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Small, marginal, and landless farmers face challenging conditions that hinder their ability to improve their productivity and livelihoods. Across India, and particularly in Eastern Uttar Pradesh, these farmers confront high costs of production, limited surplus due to land fragmentation, and complex, inefficient markets. Farmer producer organizations allow these small farmers to collaborate for economies of scale, bargaining power, and lower transaction costs. However, farmer producer organizations face their own set of challenges, such as limited access to formal credit for working capital and infrastructure, entrenched value chains in which most actors have pre-existing relationships, and lack of business acumen among leadership. This report examines Lehra Agro-Producer Company Ltd. (LAPCL), a farmer producer organization in Eastern Uttar Pradesh, as a case study of the challenges that these organizations face. Interviews and focus groups with stakeholders in the region helped inform recommendations for business strategies and support programs that could enhance the ability of LAPCL and similarly situated farmer producer organizations to support small, marginal, and landless farmers.
Introduction
Although agriculture is often described as the “backbone of the Indian economy,” the sector has yet to realize its potential as a driver of growth and poverty reduction. An estimated 42 percent of India’s workforce is in the agriculture sector, but it makes up only 15.5 percent of the nation’s economic output. For small, marginal, and landless farmers (henceforth referred to as SML farmers), agriculture offers only a precarious livelihood. In Uttar Pradesh, the country’s most populous state and one of its poorest, 92 percent of farmers have less than two hectares of land, and 79 percent have less than one hectare. These small landholdings lead to low incomes. Farmers possessing one to two hectares of land generate an annual income of approximately $1,200, with approximately half of that income coming from farming. Farmers with farm sizes smaller than one hectare make less than $1,000 annually. Fragmented holdings, limited marketable surplus, high costs of inputs and production, and inefficient agricultural markets (both public and private) have contributed to these low incomes and prevented agriculture from being a more prominent force in the Indian economy. Past policies that have sought to improve farmer productivity and livelihoods have largely been ineffective, often targeting farmers with larger land sizes and continuing to exclude the overwhelming majority of farmers with small plots.

Since the issuance of the Policy and Process Guidelines for Farmer Producer Organizations in 2013 by the Department of Agriculture and Cooperation, the government has sought to encourage the creation of farmer producer organizations (FPOs) to enable collective purchases of inputs and sale of crops, reducing costs and increasing market power. Government promotion of the formation of FPOs and facilitation of lending to them has helped in some ways, allowing farmers more affordable access to inputs and creating opportunities for resource- and knowledge-sharing. However, FPOs’ needs for technical assistance and resources are not being met, and agricultural markets make it difficult for FPOs to reap the full benefits of collectivization. With improvements to agricultural markets and increased support from the government (and other value chain actors), FPOs represent an opportunity to improve farmer wellbeing, as well as agricultural productivity.

2 “Employment in Agriculture (% of total employment) (modeled ILO estimate); Agriculture, value added (% of GDP)” World Bank, 2018.
3 “Uttar Pradesh: Poverty, Growth, and Inequality” World Bank Group (2016)
This report reviews the literature on challenges facing SML farmers and on the role of FPOs in improving their production, market access, and incomes; provides a case study of the business model and current challenges of the Lehra Agro-Producer Company Ltd. (LAPCL), an FPO operating in the Maharajganj District of eastern Uttar Pradesh; and recommends that LAPCL move forward with a strategy of joining the supply chain of a larger agribusiness company. This recommendation, which also applies to other FPOs in similar contexts, will require external support, discussed in the concluding section.
SECTION 2

Literature Review

- Challenges Facing Small and Marginal Farmers in Uttar Pradesh
- FPOs as a Solution
- External Support for FPOs
- Conclusion: The Potential and Challenges of FPOs
Challenges Facing Small and Marginal Farmers in Uttar Pradesh

Eastern Uttar Pradesh has the highest share in Uttar Pradesh of its Gross Cropped Area under food grains cultivation (87.2% in 2013-14).

SML farmers throughout India face a difficult set of circumstances, and this is particularly true in eastern Uttar Pradesh. The area's climate and irrigation systems present a challenge for any farmer. The climate of Eastern Uttar Pradesh is considered humid subtropical, with wet summers and dry winters. It is prone to frequent flooding, droughts and soil salinity, depending on the region within Eastern Uttar Pradesh. The agriculture is primarily rainfed, with rice and wheat as the main crops. Eastern Uttar Pradesh has the highest share in Uttar Pradesh of its Gross Cropped Area under food grains cultivation (87.2 percent in 2013-14). Rainfall is concentrated between June and September, with about 90 percent occurring during this period. Floods are a recurring problem, causing significant damage to crops, life, and property.

Despite high rain levels during monsoon season, Eastern Uttar Pradesh suffers from declining groundwater levels and water availability in wells. The irrigation ratio in eastern Uttar Pradesh is 74.6 percent, as compared to 87.6 percent in Western Uttar Pradesh. Furthermore, Eastern Uttar Pradesh has the highest crop water requirements within Uttar Pradesh. While the Western and Central Zones of Uttar Pradesh are relatively well-irrigated, the same is not true for the Eastern zones. Although the Indian government has engaged in public investment in irrigation reservoirs and distribution systems throughout the country, small farmers in this area have not been able to reap the benefits of government irrigation expansion programs. While large farmers can rely more on canal water, SML farmers must rely on groundwater, which is depleting in many areas of India, including Eastern Uttar Pradesh. Furthermore, SML farmers are often unable to procure irrigation systems for themselves, as “the declining size of landholdings impacts farm incomes and farm income is closely associated with the capability of the...
However, the natural challenges of Eastern Uttar Pradesh pale in comparison to the institutional and market challenges facing SML farmers. Expensive inputs and small plot sizes prevent SML farmers from producing high-value crops or significant marketable surpluses. Many are subsistence farmers and depend on off-farm activities for cash income, but those who do attempt to sell surplus crops are in a disadvantaged position in local markets. They can only offer small quantities of goods, and they lack power and connections to important supply chain actors. Several of the key challenges to increasing farmers’ incomes through improved productivity and market access are discussed below.

High Cost of Production

SML farmers face high input costs and lack the income to invest in producing larger quantities or higher value crops. Farmers interviewed in Maharajganj reported that it is often difficult for them to obtain affordable and high-quality seeds, fertilizers, and chemicals for crop protection, and research by Athena Infonomics found that more than 45 percent of farmers surveyed in 10 districts of eastern Uttar Pradesh experienced difficulty accessing inputs because of high prices.\textsuperscript{16} The Indian Ministry of Agriculture reported that the cost of cultivation (Rupees per hectare) in 2015 and 2016 for various crops is the following in Uttar Pradesh: arhar/pigeon pea, Rs. 15,628.34 [USD $223.48]; paddy, Rs. 29,679.37 [USD $424.40]; gram/chickpea, Rs. 17,732.68 [USD $253.57]; and lentils, Rs. 13,718.19 [USD $196.16].\textsuperscript{17} As previously mentioned, the annual income of farmers in India with less than one hectare of land is less than $1,000, and not all of this income comes from farming.\textsuperscript{18} Comparing these numbers demonstrates the difficult mismatch between costs and profits for small farmers.

Similarly, because most SML farmers are not capable of purchasing their own machinery and equipment (such as...
water pumps or tractors), interviewees reported renting equipment from wealthy local farmers at expensive rates in order to prepare their land. Costs that facilitate market access, such as transportation expenses, processing fees, and market commission fees, are often high and significantly eat into small profits. Furthermore, the poor quality of infrastructure and limited access to roads and warehouses in Uttar Pradesh is also cited as a major barrier.  

Financing and Debt

Farmers often take out loans in order to finance inputs or the purchase or rent of essential equipment. However, available financing may not be sufficient to make major investments in the farm’s productivity; for example, the Kisan Credit Card, a common loan product targeting SML farmers, provides only up to Rs. 100,000 [USD $1,440] of collateral-free credit. In addition, borrowing can deepen farmers’ challenges by trapping them in cycles of debt and providing leverage to lenders who also serve as market intermediaries.

Farmers may struggle to access credit from formal institutions for numerous reasons: lack of awareness, perceived complexity of procedures, and reluctance on the part of banks to lend to SML farmers with no collateral. With limited access to institutional credit, farmers “turn to the moneylenders for survival and then fall into the debt trap. Inability to repay such debts [has] forced [some] farmers to take their lives.” In some cases, moneylenders who provide credit to farmers who cannot access formal lending also serve as market intermediaries. Their dual role gives them the leverage to demand that farmers sell produce to them for low prices. Because farmers are required to sell the produce to the lender to pay off the debt, they lose their ability to bargain for higher prices in a competitive marketplace.

The high rates and harsh terms offered by moneylenders make them an especially problematic source of credit. However, even farmers who can access formal credit can find themselves with unsustainable levels of debt. Central and state
governments have repeatedly stepped in to prevent further farmer indebtedness and self-harm, leading to significant loan waivers that negatively impact the profitability of banks and government institutions. For example, in the Union Budget of 2008-09, the Government of India announced a scheme of Agricultural Debt Waiver and Debt Relief Scheme (ADWDR-2008) for farmers. The total value of overdue loans being waived estimated at Rs.50,000 crores [approximately USD $7 billion] and a one-time settlement relief on the overdue loans at Rs.10,000 crores [approximately USD $1.5 billion] for implementation by all scheduled commercial banks, besides RRBs [Regional Rural Banks] and Cooperative credit institutions. Repeated loan waivers reduce formal financial institutions’ willingness to lend to SML farmers, who then have to rely more on informal moneylenders. Although farmers are willing and able to pay back loans at reasonable rates, overreliance on loans with high interest rates and low profitability has caused distress within farming communities.

**Limited Marketable Surplus**

Only 32 percent of farmers in the 10 districts studied by Athena Infonomics sold any of their produce, and most SML farmers only sell small quantities. SML farmers are often more oriented towards self-consumption than profit-making and have the highest rates of retention and consumption within the agricultural community. Small marketable surplus is associated with low income and savings, meaning that farmers cannot invest in improving their livelihoods and productivity. Family members within SML farmer communities often migrate to other areas of India for work, given that the limited agricultural surplus cannot augment the family income. However, in some cases this prevents productivity increases on the farm (as the focus remains on subsistence) and risks weakening social ties.

Furthermore, small plot sizes caused by land fragmentation means that even if farmers have sufficient capital to produce more output and sell it, they are constrained by the space that

25 Salve & Biradar, 635.
27 "Learning Study," Athena Infonomics.
28 Roy, 77.
they have to grow. Some SML farmers in the Maharajganj District use a portion of their land to grow crops for market, but they can only sell the small amount they produce locally due to transportation costs and market fees. On their own, SML farmers cannot provide sufficient quantities of produce to be of interest to large-scale buyers who can offer higher prices or exercise influence over prices. Instead, local intermediaries aggregate small quantities from numerous farmers and sell to a larger buyer—an inefficient market structure that gives farmers very little bargaining power.

**Inefficient Markets**

Agricultural markets in eastern Uttar Pradesh are far from perfectly competitive, and there are many barriers that prevent the natural equilibrium of supply and demand. A study performed by the U.S. Department of Agriculture suggests that 22 percent of India’s national revenue losses are caused by inefficiency in the agricultural market, such as inaccurate prices or an underproductive output mix. For example, if farmers were able to reallocate land away from grains to higher-value outputs such as horticulture and livestock commodities, their revenue could increase by up to 15 percent.

The first key inefficiency arises from information asymmetries: SML farmers often lack the information necessary to negotiate prices. There are two main stages to this information asymmetry. First, when farmers purchase inputs from dealers, they often lack information on which types of crops fetch the highest prices and are suitable for growing on their land. Interviewees in Maharajganj reported that many dealers do not have the interests of the farmers in mind and prioritize selling any inputs they can. Therefore, farmers may not have the ideal crop allocation in terms of what can grow easily on their land and fetch high prices in a given season. The second type of information asymmetry is the absence of real-time market price information. If farmers travel to a market to sell their goods, they are willing to sell at low prices because

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transportation costs (or effort, if they transport their goods on a bicycle) prevent them from returning to their farm with unsold goods. If an aggregator comes to the farmgate, farmers will not know whether they could obtain a higher price elsewhere. Farmers also need cash to begin the next planting cycle, leading them to sell their crops immediately to local aggregators. Although they may not perceive this as a “distress sale,” information about when and where they could receive higher prices could provide farmers with an alternative to accepting low prices that limit their ability to invest in the next cycle. The government and leading food companies have begun to take note of this inefficiency and are promoting price information platforms to enable farmers to check prices before they travel to a distal market or sell to an aggregator. However, these platforms must be created with SML farmers in mind, as they generally lack access to technology beyond a mobile phone with SMS capabilities.

Secondly, supply chains tend to be highly complex. Intermediaries such as aggregators, commissioners, and brokers work between farmers and consumers. Each intermediary takes a share of the profits, diminishing the margin ultimately available to the farmer. Although farmers are aware of the potential income lost to lower prices and intermediaries’ fees, they lack the network and working capital to create final products and sell to final buyers. Intermediaries provide services necessary to the functioning of the market, including credit, connections between buyers and sellers, storage, and transport. However, there are ways - including through FPOs - to provide these services more efficiently and reduce the complexity of supply chains, offering more value both to the farmer and the final purchaser.

As a result of information asymmetries and complex supply chains, farmers in Eastern Uttar Pradesh are unable to receive remunerative prices for their main products - wheat and rice.\(^{32}\) Government procurement offers a possible alternative to the market for these crops, but procurement operations carried out by state agencies are inefficient (see section on Minimum Support Price, page 17). The prices at government mandis for wheat and rice are often 10 to 25 percent below the Minimum Support Price offered by government procurement agencies.\(^{33}\)

\(^{32}\) Verma, 26.
\(^{33}\) Ibid, vi.
Although this pricing issue exists throughout Uttar Pradesh, it is pronounced in the Eastern regions.\textsuperscript{34}

**A farmer producer organization (FPO) is a registered organization formed by a group of producers for farm or non-farm activities.**

A farmer producer organization (FPO) is a registered organization formed by a group of producers for farm or non-farm activities. The producers are shareholders of the organization and the organization works to benefit its members. India’s National Bank for Agriculture and Rural Development (NABARD) recognizes the role of Indian FPOs as the following: procuring inputs; disseminating market information; sharing technology and innovation; facilitating finance for inputs; aggregating and storing produce; engaging in processing activities such as drying, cleaning, and grading; building a brand; packaging, labeling, and standardizing products; ensuring quality control; marketing to institutional buyers; and exporting and participating in commodity exchanges.\textsuperscript{35}

The overarching way in which FPOs help their members to overcome the challenges discussed above is through collective action. By pooling members’ output, FPOs can supply a large enough quantity of produce to attract larger-scale buyers and negotiate prices more effectively. Cooperative organizations, including FPOs, have also been a powerful tool for social empowerment, particularly of women and marginalized castes.

**Benefits of FPOs**

**Economies of Scale & Comparative Advantage**

During the production phase, SML farmers benefit from collective action because they can share equipment and buy inputs in bulk at a lower price, allowing for economies of scale.\textsuperscript{36}

\textsuperscript{34} Ibid, vi.


\textsuperscript{36} S. Parasuraman, “Can India be a Beacon of Hope for the World?,” Economic and Political Weekly, 52.8 (2017): 3.
Farmers within an FPO can also create a more robust business by coordinating crop mix for joint production. Experts interviewed discussed the benefits of FPO members choosing to grow a small selection of crops; by having some farmers grow the same crops, the FPO has sufficient quantity to meet the requirements of Minimum Support Price (MSP) procurement or an assured buyer. However, having some diversity in the FPOs crop mix reduces the risk that one crop might fail in any given season.

**Information Sharing & Value Add Services**

Within an FPO, farmers can share information and best practices regarding cultivation and technology to overcome common challenges. High-capacity FPOs can deliver trainings and offer agricultural advice to members, such as which seasonal high-value plants to plant and how to properly use machines. FPOs may use village-level “key people” to communicate with members and provide business services such as taking orders for inputs and delivering products, which creates a built-in network for passing along information about agricultural practices. Given the challenge of information asymmetry in agricultural markets, FPOs can also utilize their member networks to spread information about market demand and price trends so that farmers can plan for harvesting and sales. As FPOs mature, they can help farmers earn more by introducing value-add services such as product certification, branding, and quality differentiation. In addition to providing information and services directly, FPOs can provide an institutional platform for public institutions and NGOs to deliver advisory and support services to farmers.

**Increased Bargaining Power & Lower Transaction Costs**

Collective action provides SML farmers with better access to markets. As a group, they have more bargaining power and attract more attention from potential partners (both upstream and downstream) than any one SML farmer would as an
individual. FPOs can aggregate crops from multiple farmers and then sell to larger buyers that demand a minimum quantity. For example, FPOs have built relationships with private companies and established formal contractual agreements for out-grower schemes and contract farming. Although these partnerships take different forms, they all allow the FPO to bypass intermediaries that would have otherwise taken a cut of the price, thereby increasing FPO profits and farmer incomes.

Marketing crops through an FPO also reduces transaction costs, to the benefit of both farmers and buyers. Cooperation through an FPO can reduce information and search costs, negotiation and contracting fees, communication efforts, and transportation costs for SML farmers. With lower transaction costs, farmers can invest more time and money into productivity-enhancing initiatives and improve their own wellbeing. Reduced transaction costs can also benefit the other end of the value chain - buyers. When farmers aggregate their goods and collaborate to supply quality products, buyers can spend less time and money searching for products. With FPOs representing groups of farmers, buyers can negotiate directly with farmers and bypass multiple intermediaries. These reduced costs can be passed on to the final consumer, thereby allowing the end user to benefit from quality goods at a lower price.

**Social Empowerment & Cohesion**

Other forms of collective action, such as cooperatives and self-help groups, are known for empowering impoverished or marginalized populations, and bringing heterogenous groups together for a common goal. For example, self-help groups have been promoted by NGOs in rural and poor areas to build a strong financial network, overcome caste differences, reduce conflicts, and improve the social standing of marginal groups. FPOs have an opportunity to play the same role. FPOs can empower female farmers by enabling collective action to address gender-specific problems, increasing access to economic resources, providing skills and information, and connecting women to support services. Given the prevalence of self-help groups (SHGs) in rural India, FPOs can also utilize

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41 Longo, 3.
42 Falowski and Chiaian, 30-31.
Most of India’s estimated 5,000 FPOs operate at a relatively small scale, but there are numerous examples of highly successful farmer-run businesses. In India and globally, FPOs that have achieved significant growth and profitability often receive substantial external financial and technical support early in their life cycle, particularly in the areas of business management, marketing, and value addition. External actors, such as NGOs or government programs also often help them develop direct linkages with larger buyers. Internally, successful FPOs are typically established on the initiative of the farmers, rather than with external prompting, and maintain participatory, member-centric decision-making structures.

**Case Studies: Examples of FPO Success**

Most of India’s estimated 5,000 FPOs operate at a relatively small scale, but there are numerous examples of highly successful farmer-run businesses. In India and globally, FPOs that have achieved significant growth and profitability often receive substantial external financial and technical support early in their life cycle, particularly in the areas of business management, marketing, and value addition. External actors, such as NGOs or government programs also often help them develop direct linkages with larger buyers. Internally, successful FPOs are typically established on the initiative of the farmers, rather than with external prompting, and maintain participatory, member-centric decision-making structures.

The three FPOs discussed below highlight some of the pathways to success.

**Jeevika Project in Bihar, India**

In 2006, the government of Bihar introduced Jeevika, an initiative for poverty alleviation, with support from the World Bank. The project promoted FPOs as business platforms to overcome the challenges that SML farmers face. It provided the FPOs with key infrastructure such as an aggregation center and input supplies. Furthermore, Jeevika introduced an extension service in which a village-level resource person provided training and advisory service. The project also introduced post-harvest management practices such as grading and sorting to increase FPO members’ emphasis on quality. By 2016, the project had supported the establishment of four women-run FPOs that cultivated seeds (Khagaria), maize (Purnea and Khagaria), and vegetables (Nalanda and Muzaffarpur). These FPOs drew on the membership of local SHGs, which provided easy access to credit for members to invest in improving cultivation and allowed them to build on preexisting social capital. Women

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49 World Bank (Jeevika), 107.
who joined the FPOs received technical training on aggregation, primary processing, management, business planning, and accessing markets.

The project hired technical assistance providers such as TechnoServe to train members in financial management and business planning, which proved crucial to their success. The FPOs’ management capacity gave financial institutions confidence, enabling them to obtain formal credit relatively early in their life cycle. For instance, AAPCL Purnea, the FPO focused on maize, obtained loans of USD $780,000 from formal institutions such as the State Bank of India and Friends of Women’s World Banking within its first two years of operation.\textsuperscript{50} Technology was also an important element of the Jeevika FPOs’ growth. By introducing online trading platforms and providing members with training and technical support as they learned to use them-the project helped FPOs expand into larger markets, allowing them to work around local traders.\textsuperscript{51} Connecting with national and international buyers online has been a key driver of profits for two of the four FPOs.

**Avirat Agro Business Producer Company Limited (Avirat) in Gujarat, India**

Shikshan Ane Samaj Kalyan Kendra (SSKK), a network of NGOs in the Amereli District of Gujarat, established an FPO named Avirat in 2006. SSKK invited 1,600 farmers from 16 villages in Amereli to participate in Avirat, which initially focused on providing quality pesticides at affordable prices. Avirat now benefits farmers through its provision of four main services:

- **Input Supply:** Avirat purchases government-approved seeds for seasonal, high-value crops at cheaper prices by negotiating with input suppliers on bulk purchases. Farmer members reported that they have collectively saved approximately Rs. 1 million [USD $14,480] through these lower prices. Furthermore, it means that the farmers do not have to rely on government subsidies for inputs.\textsuperscript{52}

- **Technical Training:** Avirat provides training and facilitates farmer-to-farmer teaching on crop

\textsuperscript{50} Ibid, 72.

\textsuperscript{51} Ibid, 72.

development, irrigation methods, disease prevention, and machine operation. It also disseminates information such as market trends, commodity prices, minimum support prices, and weather alerts. A kiosk provides agricultural information to more than fifty villages. Avirat also connects farmers and agricultural universities to update farmers on the latest farm technology and practices. Through this process, Avirat successfully introduced new high-value crops such as groundnut and cotton in the Amreli area.53

- **Procurement and Packaging:** Avirat partners with SHGs to add value to the products. For example, SHG members use groundnuts aggregated by the FPO to produce groundnut powder and candy. This final good can fetch higher prices and has an extended shelf life, making it possible for the FPO to store it and sell at a more profitable time.54

- **Market Linkages:** Members pool products and transport them to urban markets in order to eliminate intermediaries and obtain higher prices. One tactic that sets Avirat apart from other FPOs is that it organizes “Kishan Melas” (Farmer Fairs) to generate visibility for local farmers, allowing farmers to sell fresh produce directly to local consumers.

When considering its strategy, Avirat views building market linkages as essential for increasing farmer income; however, it sees the aggregation, packaging, and value-addition processes as an important first step to overcome the entry barriers to upscale markets.55 Avirat now has a wide array of offerings and is working to become a self-sustained enterprise so that it no longer relies on grants from its sponsor NGO.

**Kuzhumai FPO in Madurai, India**

Kuzhumai is an FPO for dairy products established in Tamil Nadu. It was started by five women who sold milk to villagers at a small scale. As directors, these women invited 650 milk producers who were members of 48 SHGs in the area to become members. Kuzhumai focuses on improving milk production, offering training, and increasing marketing

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53 Ibid, 678.
55 Ibid, 673.
Kuzhumai divides women into different groups to address the various needs of cattle farming and milk production.

To improve production, Kuzhumai divides women into different groups to address the various needs of cattle farming and milk production. For example, some women work on feeding cattle and producing milk, while other members perform quality checks and work on disease prevention. To support this initiative, the FPO conducts trainings on cattle rearing, milk production, feeding, and maintaining cattle health. For better marketing, Kuzhumai established a contract with a private dairy farm in Coimbatore, which ensures continuous production and supply for the dairy farm, as well as profit generation for the farmers.56

Farmer Cooperatives in Africa Improve Agricultural Efficiency and Livelihoods

After economic liberalization in Africa in the 1990s, different forms of grassroots organizations began to emerge for the benefit of members. Community-based organizations and farmer associations with small farmers formed Rural Primary Organizations (RPOs) at the village level. RPOs aggregated products from individual members for collective marketing. Some RPOs also formed Area Cooperative Enterprises (ACE), cooperative unions for the RPOs. ACEs have benefited from a greater level of scale to find the best markets for selling members’ output and bargain for higher prices. They can market outputs to any buyer along the value chain.

Cooperatives have been able to diversify their services to improve farmers’ livelihoods in the face of changing agricultural landscapes. For example, approximately twenty dairy cooperatives in Kenya set up milk cooling and processing plants for value addition to farmers’ produce. This innovation has allowed farmers to earn more income than if simply marketing fresh, raw milk.

Furthermore, cooperatives have allowed farmers to find market opportunities outside of the domestic market. For example, Oromia Coffee Farmers’ Cooperative Union in Ethiopia, Kuapa Kokoo Limited in Ghana (which produces cocoa beans), and Heiveld Cooperative Society in South Africa (which produces rooibos tea) have embraced fair-trade and organic practices to market their products abroad at competitive prices. Certified organic labels have allowed them to find niches in the international market.

As these cooperatives have become more market-oriented and demand-driven, their performance has improved and as a result, they have increased the incomes of participating members and enhanced the provision of socio-economic services to both members and the wider community. Supportive legal frameworks and governance, tailored donor support, and alignment between member and cooperative goals have been identified as essential for the success of these cooperatives.


Case Studies: Conclusion

These case studies highlight how FPOs can provide a package of opportunities for SML farmers, expand their business model, and operate at scale. However, external support often played a vital role. A common challenge for FPOs is overreliance on technical assistance from NGOs, government organizations, or external actors such as the World Bank. Once they have achieved scale and profitability, the next step is to develop sufficient internal management capacity to operate independently. Some FPOs and cooperatives have reached this point, but for many FPOs promoted more recently, sustainability is still several years away.

Building on Past Models

The Indian government and development partners such as the World Bank and the Bill & Melinda Gates Foundation have recognized the value of FPOs and made support for them a priority in recent years. In contrast to past policies to support small and marginal farmers, FPOs are more independent and market-oriented, which offers greater potential for growth and sustainability.

FPOs offer several key structural benefits. Only “primary producers” can become members and have voting rights, which limits opportunities for elite outsiders to take control of the group. In addition, both registered and non-registered groups such as SHGs can become equity holders, which allows FPOs to build on existing community structures. FPOs, especially those registered as for-profit producer companies, also have a strong commercial orientation, which complements other institutions that focus more on social welfare.

Lessons from Primary Agricultural Credit Societies

FPOs offer an alternative to the system of Primary Agricultural Credit Societies (PACS), which were previously a focus of policies to promote collective action among farmers. Unlike FPOs, their primary function is the provision of rural credit to...
individual farmers, but PACs also provide agricultural inputs and marketing services. PACS have struggled with political interference and poor administration, leading to weak financial performance: rural PACS reported overdues of approximately 32 percent, compared to 3.3 percent for commercial banks. FPOs should view the PACS as a cautionary tale, but their challenges offer some lessons on pitfalls for FPOs to avoid.

Poor governance is at the root of the failure of the cooperative system, and FPOs should exercise caution in forming very close relationships with the government. Government influence over the PACS caused politically motivated lending to take priority over risk management, with PACS and other state institutions channeling loans to farmers regardless of their ability to pay in order to win political support. The government often subsequently forgives nonperforming loans, creating a severe moral hazard problem. Although FPOs are not directly controlled by the government, their management should learn from the PACS and maintain their political independence and egalitarian structure, which will allow for more prudent decision-making.

The PACS also highlight the challenge of administrative capacity, which is highly relevant for FPOs. In many PACS, weak internal control systems have created opportunities for fraud and the loss of private customer information, while inadequate understanding of their borrowers and poor risk management have hurt their financial performance. The problems have been compounded by giving PACS with low capacity additional roles, for instance requiring them to serve as centers for MSP procurement despite employee shortages. FPOs should be aware of the need to develop strong administrative capacity and oversight, carefully evaluate and mitigate risks, and avoid expanding beyond their capacity, even when external support is available to do so.

**Complementing SHGs**

SHGs and related organizations are a crucial part of the rural livelihood infrastructure in India. Since its beginning in the 1970s, the self-help movement has put down roots across the country. SHGs’ key role has been to facilitate rotating savings and lending among members, but SHGs also sometimes

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organize members to engage in collective businesses, such as seed cultivation, handicrafts, or value addition to agricultural products. SHGs have been a valuable tool for the empowerment of women and other marginalized groups by creating a platform for collective action, improving their access to financial resources, and providing new skills such as bookkeeping and literacy.64

Although FPOs and SHGs share some broad goals and characteristics, they each have a distinct role to play in improving the livelihoods of SML farmers. Even where SHGs are well-established, FPOs can add value. First, SHGs often tend to focus on individual saving, rather than collective businesses activities. In this situation, an FPO can build on the networks established by village-level SHGs and broader SHG federations to engage members in business activities. Although SHGs rarely engage in collective lending, there still may be synergies in which individual members borrow to finance investments in business opportunities created by the FPO, for instance to buy inputs for a new crop the FPO is engaged in marketing. Second, for SHGs that are engaged in income generating activities, an FPO can take their business to the next level, as discussed in the examples of the Jeevika project and Kuzhumai FPOs above. FPOs offer a more commercial orientation, an institutional structure that is designed to scale, and different opportunities for marketing and borrowing than an SHG. SHGs and FPOs can collaborate effectively, and their membership often overlaps, but they each bring different opportunities to rural farmers, and experts interviewed recommended keeping their functions separate.

External Support for FPOs

As a key element of the Indian government’s strategy to improve rural livelihoods, FPOs are direct beneficiaries of some support programs and serve as platform for farmers to access others. FPOs can both directly benefit from lending and

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training programs and help farmers access these services. FPOs can also help small and marginal farmers access the Minimum Support Price system and new digital price discovery platforms, both of which are intended to provide farmers with more favorable prices. However, access to external support is often limited in practice, both for individual farmers and FPOs.

### Lending and Credit

Access to finance is a key challenge for SML farmers, with only 27 percent of farmers with landholdings smaller than one hectare borrowing from banks and 41 percent relying on informal moneylenders. Although FPOs can offer more viable business models and gradually develop sufficient management capacity to appear credible to formal lenders, in the early stages, they often experience credit constraints as well. To help FPOs achieve viability, the Indian government has established several policies to ease FPO access to credit. Key sources of early-stage formal financing for FPOs include:

1. **NABARD’s Producer Organization Development Fund:**
   The fund offers loans that can be used for working capital, financing of marketing infrastructure, and payment for capacity building services. FPOs can also receive grants of up to 20 percent of the loan amount. To obtain a loan from the fund, FPOs are required to submit a concept note, and if approved, a detailed proposal, which can be prepared with the assistance of an external agency or NGO.

2. **NABKISAN Finance Ltd. (NKL):** A subsidiary of NABARD, NKL lends to institutions such as trusts and MFIs that on-lend to FPOs, as well as to FPOs directly. Notably, NKL offers loans of up to Rs. 5 million [USD $72,000] to “promising” FPOs that cannot yet provide adequate collateral but whose business activities are generating a surplus. To be eligible, FPOs have a sound business plan, active member involvement, a professional management team, and support from a reputable

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66 “Financing and Supporting Producer Organizations,” NABARD.

Sustainable Farmer Producer Organizations for Improved Agricultural Productivity and Farmer Livelihoods
organization. NKL will also provide initial loans of up to Rs. 2 million [USD $29,000] without collateral to “start-up” FPOs with a net worth of at least Rs. 100,000 [USD $1,400] and support from a reputable organization.\textsuperscript{67}

- **Small Farmers’ Agri-Business Consortium (SFAC):** FPOs with capital of less than Rs. 3 million [USD $40,000] are eligible for equity grants of up to Rs. 1.5 million [USD $1,600], disbursed in two installments over three years. The online application process is relatively straightforward, but could still be challenging for small FPOs, and does require a credible 18-month business plan. Since 2014, 417 FPOs have received equity grants, including 76 in Uttar Pradesh. SFAC also guarantees loans of up to Rs. 10 million [USD $45,000] made to FPOs by formal lenders, both public and private.\textsuperscript{69}

In addition, the Indian government has a range of policies to promote access to formal credit for individual SML farmers. Under the Priority Sector Lending program, banks are required to allocate 18 percent of net credit to agriculture, and in 2014, RBI introduced a new sub-target requiring that 8 percent of net bank credit go to SML farmers.\textsuperscript{70} (However, last year, private and foreign banks did not meet these targets.) The main financial product offered to SML farmers is the Kisan Credit Card, which was developed by NABARD to help farmers get easy access to short term crop production credit. However, the credit can also be used for other needs such as consumption, insurance payments, or farm maintenance. Obtaining a KCC requires only simplified forms and no collateral for loans below Rs. 100,000 [USD $1,440].\textsuperscript{71} The government also offers an interest subvention of 2 percent for SML farmers over the floating rate set by the banks. Farmers who repay their loans promptly can have their interest rates reduced by an additional 3 percent. However, this scheme only applies to short-term agricultural loans under Rs. 300,000 [USD $4,320].\textsuperscript{72} In addition to promoting individual financial products, the government encourages groups of SML farmers to open joint bank accounts through the SHG-Bank Linkage program, and to borrow collectively through Joint Liability Groups, leveraging the credibility established by their internal lending and repayment cycles.

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\textsuperscript{67}“Financing of FPOs,” Nabkisan Finance Limited.
\textsuperscript{68}“Equity Grant Scheme Statistics,” Small Farmers’ Agri-Business Consortium (Department of Agriculture and Cooperation, Government of India).
\textsuperscript{69}“Equity Grant & Credit Guarantee Fund Scheme for Farmer Producer Companies: Operational Guidelines,” Small Farmers’ Agri-Business Consortium (Department of Agriculture and Cooperation, Government of India).
Eventually, a well-established FPO could assist members in accessing formal financial services, but in practice, financing remains a challenge for both FPOs and individual SML farmers. Banks are reluctant to lend to groups or individuals without collateral, despite government policies. Navigating even simplified procedures is a challenge for illiterate farmers with limited access to information, and requirements for larger business loans are more onerous. Furthermore, many major credit access policies, such as the KCC, target individual farmers and do not offer sufficient amounts of subsidized credit for FPOs to make collective investments, for instance in machinery or large-scale storage facilities. However, with sufficient technical assistance to prepare credible business plans and build up managerial capacity, there are numerous avenues for FPOs to access formal early-stage financing.

**Technical Assistance and Training**

Central and state governments, NGOs, international development organizations and leading agribusiness companies all actively provide technical support to farmers, both to improve their agricultural practices and to improve their business management capacity.

A wide range of public and private institutions research agricultural technologies and provide information to farmers about how to improve their productivity. Public extension services are provided by the Krishi Vigyan Kendras, agricultural extension centers whose scientists offer technology transfer and coaching to farmers. Government technical support programs now include information on sustainable practices, such as water conservation and judicious use of chemicals and fertilizers, in addition to the traditional emphasis on productivity. In addition to the government, World Bank projects and NGOs provide extension services and provide information on inputs, crop choices, and sales. Large companies such as Reliance and ITC also provide extension services to farmers that they source from to ensure they produce efficiently and adhere to quality standards.

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However, effective technical assistance to FPOs needs to professionalize the organizations’ management in addition to improving members’ agricultural practices. The farmers who serve in FPO leadership positions often have low levels of literacy or formal education, and they need to develop a new skill set to manage a business. NGOs and consulting firms are typically the primary providers of business skills training, which may cover areas such as accounting, business planning, marketing strategy, member relations, and legal compliance. These actors may also facilitate connections between FPOs and financial institutions, government programs, or market actors, as Yuva Mitra, an organization supporting FPOs in Punjab and Maharashtra, has done through its one-stop FPO Facilitation Centre.75

Capacity building in business management may target FPO leadership directly or use a train-the-trainer model targeting NGOs. For instance, Yuva Mitra76 and the International Crops Research Institute for the Semi-Arid Tropics77, have used train-the-trainer approaches in partnership with NABARD to improve the ability of NGOs, which may lack experience in market activities, to provide adequate business support to the FPOs they work with. Business skills trainings are delivered through workshops, but there are opportunities to introduce more innovative models. One possible alternative is community-produced videos displayed at meetings of farmer groups, which Digital Green pioneered for providing agricultural extension services, but could be adapted to cover business management skills as well.78

75 Hiren Borkhatariya, “FPO Facilitation Centre,” Yuva Mitra (Last Modified 2018).
77 “Equipping Farmer Producer Organizations to Face Competition,” ICRISAT (Last Modified 2016).
78 “Community Videos,” Digital Green.
External Support and Capacity Building for Smallholder Organizations in Africa

Best practices demonstrate that, although grassroots organization of smallholder farmer organizations is necessary for sustainability (rather than top-down government development and supervision), the state and non-state organizations must play a role in making investments that give smallholders agency. These investments must be balanced with a legal and policy environment that enables the private sector to engage directly and effectively with smallholder farmers.

Empirical studies conducted in Malawi demonstrate that building the capacity of farmers to understand markets and their relationship to farming decisions allows farmers to benefit from markets. In the Salima District in Central Malawi, training and capacity building that focused on organizational skills, staggered production, market research, advertising, commodity pricing, consistency in maintaining quality and volume of production, adhering to delivery times, and loyalty to contractual arrangements allowed smallholder organizations to expand operations and take on roles formerly played by intermediaries.

In South-West Uganda, the International Centre for Tropical Agriculture (CIAT) used an iterative market-led learning process to link Nyabyumba potato farmers to markets. This process included building the capacity of farmers to conduct market research, produce for the market, and innovate their farm enterprises. As a result, the potato farmers were able to meet the rigorous requirements of the potato market and successfully sell their products.


Minimum Support Price (MSP)

To incentivize production, provide farmers with an income floor, and protect farmers from price volatility, the government purchases major crops at a fixed Minimum Support Price (MSP). The price is set each year by the government based on the recommendations of the Commission for Agricultural Costs and Prices. The MSP system largely caters to individual farmers, although FPOs can be licensed to serve as procurement agents for the government. For instance, SFAC, which manages procurement for pulses and oilseeds in several states, has used FPOs as ground-level procurement agents in Andhra Pradesh, Gujarat, Karnataka, Maharashtra, Madhya Pradesh, and Rajasthan. However, this model does not appear to be present in Uttar Pradesh.
In addition, the MSP procurement system is notorious for administrative problems, ranging from a simple lack of bags for packaging to corruption. Distance can pose a problem for farmers with limited access to transport: MSP centers may be more spread out than the 7 kilometers required by state policy, although this can be mitigated by leveraging local agencies to assist in procurement. Prices are often announced too late for farmers to consider MSP when deciding what to produce. Furthermore, in Maharajganj, farmers reported that the local MSP center required a minimum quantity of grain that they were unable to supply. Although Grameen Development Services reported that the MSP is typically 2-4 rupees per kilogram higher than the price offered by local traders, numerous barriers prevent farmers from benefitting from the system in practice.

Farmers in Uttar Pradesh are aware of the MSP and consider it beneficial, but relatively few take advantage of the system in practice. In 2016, only 28 percent of the farmers sold their crops at a MSP center, while 63 percent sold in a market or to intermediaries and 8 percent produced only for self-consumption. A key factor that limits access to MSP is delayed payment, which is made by check rather than in cash and often takes from a week to a month in Uttar Pradesh. In Athena Infonomics’ survey, only 3 percent of respondents reported selling crops to the government for MSP, and 73 percent cited delayed payments as a reason not to use the system.

In addition, the MSP procurement system is notorious for administrative problems, ranging from a simple lack of bags for packaging to corruption. Distance can pose a problem for farmers with limited access to transport: MSP centers may be more spread out than the 7 kilometers required by state policy, although this can be mitigated by leveraging local agencies to assist in procurement. Prices are often announced too late for farmers to consider MSP when deciding what to produce. Furthermore, in Maharajganj, farmers reported that the local MSP center required a minimum quantity of grain that they were unable to supply. Although Grameen Development Services reported that the MSP is typically 2-4 rupees per kilogram higher than the price offered by local traders, numerous barriers prevent farmers from benefitting from the system in practice.

**Price Discovery Platforms**

Electronic trading platforms for agricultural commodities offer a potential solution to problems such as the lack of price transparency, lower farmer profits due to the fees charged by multiple intermediaries, and SML farmers’ lack of access to large markets. The government, leading food companies, and technology start-ups are all engaged in efforts to build these unified market platforms.
Although these platforms have the potential to address information asymmetries and help streamline agricultural value chains, they face significant practical challenges. Illiteracy prevents many SML farmers from using the platforms as intended. The Electronic National Agriculture Market (eNAM) was launched by Prime Minister Narendra Modi in 2016 and is led by the Small Farmers’ Agribusiness Consortium (SFAC) under the Ministry of Agriculture. With government support, the eNAM portal aims to connect licensed government markets (mandis) across the nation, and provide timely information about prices, trades, and services in the mandis. This is intended to help farmers decide where to sell their crops, since they can choose whichever nearby market offers the best price. In Uttar Pradesh, 100 mandis have the capability to support eNAM, but only 20 are doing so, and the volume of transactions on the platform has been low. This low volume is largely a result of slow adoption, and also the fact that traditional intermediaries, although eliminated completely on the eNAM platform, are still active in offline mandi trading. Furthermore, not all commodities can currently be traded on eNAM. If the platform is expanded for all commodities and if the state governments can successfully create awareness among FPOs, it represents an opportunity to address the issues of information asymmetry and payment delay.

**e-Choupal** was launched by ITC in 2000 as one of the earliest attempts by the private sector to deal with market fragmentation and integrate small and marginal farmers into the market. Village-level e-Choupal kiosks managed by local farmers offer real-time price and weather data, as well as information and services to improve farm productivity; all of these services allow farmers formerly disconnected from the formal market to command better prices and manage risk. There are also warehouses (called hubs) that enable scientific testing of the quality of soybeans that allow farmers to determine the price that ITC would offer. Once the price is determined at the hub, the farmer is free to sell to ITC (which they can do directly at the hub) or at the mandi. Other similar farmer-to-buyer platforms are being developed by agri-tech start-ups, such as Crofarm, Gobasco and Aibono, but these are not yet available in Uttar Pradesh.

Although these platforms have the potential to address information asymmetries and help streamline agricultural value chains, they face significant practical challenges. Illiteracy prevents many SML farmers from using the platforms as
The poorest farmers also lack internet access: most have access to a cellphone with SMS capability, but not necessarily a smartphone. In addition, SML farmers may not have bank accounts or do not use them regularly, so systems that rely on this technology will be less likely to help SML farmers. To improve eNAM uptake, in 2018, the state government began deploying leased lines (bidirectional telecommunications circuits) for higher internet speed in mandis, and it plans to provide checks to farmers who have bank accounts but lack online payment access. The kiosk-based model adopted by ITC presents an opportunity to overcome the challenge of limited internet access among individuals; however, at this stage, ITC has reported that kiosks in some rural areas have issues with reliable Internet and electricity availability. Therefore, broader public infrastructure development will be required.

FPOs can both benefit from electronic trading platforms and facilitate their adoption. For example, accessing larger markets through online trading was crucial to the success of one of the FPOs promoted by the Jeevika project. FPOs can also manage kiosks and help familiarize farmers with electronic trading platforms.

Given the current situation, FPOs are the most viable institutional option for improving the livelihoods of SML farmers. By facilitating collective action and reducing transaction costs, FPOs can help lower the costs of production, strengthen farmers’ bargaining power, connect smallholders to more lucrative markets, and provide vital information about prices and demand.

However, achieving scale and profitability is not easy. In many cases, farmers who manage FPOs lack the business skills to...
produce a credible business plan or effectively market their produce to large-scale buyers. Without such skills, accessing formal credit to invest in the business or developing a partnership with a larger company is extremely challenging. FPOs need substantial support to access financial resources, improve production and marketing, and integrate into value chains. A facilitator or “chain champion” can be essential in gaining access to profitable markets; such facilitators can “serve as a catalyst for collective action … and even enable farmers to renegotiate power relations along the value chain by introducing marketing and institutional innovations.” Such innovations can come in the form of finding new ways to market a product, access sources of funding, and stay up-to-date on training.

This support needs to last several years as the FPO grows into a self-sustaining business and builds internal capacity, but FPOs and their partners should plan for a transition to independence from the beginning. Support should also target FPOs with proactive, enthusiastic members, rather than seeking to establish them without community buy-in or a strong economic rationale. FPOs that have been formed solely to take advantage of opportunities for external support fail in the long run, while demand-driven FPOs tend to perform better. This distinction can be thought of as top-down or bottom-up; FPOs in India specifically set up for the purpose of gaining access to the NABARD scheme (top-down) have been less sustainable than those that were established due to the initiative of farmers (bottom-up).

The FPO that our team visited during our fieldwork was established by farmers, because it was desired by farmers. Therefore, it embodies the more sustainable bottom-up structure of an FPO and has significant opportunities to benefit its farmer directors and members. However, it also suffers from the challenges that FPOs uniformly face across India. The following section discusses the FPO’s history, business model, and constraints, followed by a section on options to grow its business.

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96 Falkowski and Chiaian, 27.
Case Study:

Lehra Agro-Producer Company Ltd.

- Current Business Model
- Growing LAPCL through Collective Marketing
- Short-term Investments as a Necessity for Long-term Sustainability
The Lehra Agro Producer Company Ltd. (LAPCL) is a private, incorporated farmer producer company (FPC) located in Pharenda in the Maharajganj District. LAPCL was founded by a group of farmers in 2003 as an informal organization to improve the access of farmers to inputs such as high-quality seeds, pesticides, and fertilizers. Prior to its founding, input dealers charged high prices for inferior inputs and often encouraged farmers to use inputs that were unsuitable for their land.

The founders of LAPCL wanted to create an organization that prioritized the needs of farmers, both by reducing the cost and improving the quality of inputs. They sought administrative and operational support from Grameen Development Services (GDS), a Lucknow-based NGO with two decades of experience working to enhance farmers’ livelihoods, to form this organization. In 2010, LAPCL formally registered as an FPC under the Companies Act, which allowed LAPCL to sell to farmers across a larger area. A succinct overview of the circumstances of LAPCL’s current business can be found in Appendix A.

**Current Business Model**

As a formal company, LAPCL is structured with member-shareholders. The current 661 LAPCL members each paid Rs. 100 [approximately USD $1.50] to become shareholders. LAPCL sells inputs to both members and non-members at the same prices, from a shop in Lehra Market. Ultimately, the main distinction in benefits between members and non-members is that members are consulted when prices for inputs are being set and have access to training and support. As LAPCL tries to grow its business, it should consider creating more differentiation between members and non-members, to incentivize membership and increase profits (e.g. a small markup on inputs for non-members or machine rental privileges).
LAPCL utilizes a network of farmers who serve as village-level distributors for those farmers who are unable to travel to Lehra Market to pick up inputs. The distributors are essential for assessing demand for inputs and spreading information. They are paid a small commission to collect and fill orders, but are not formal staff members. Due to limited profits, LAPCL is currently only able to maintain three formal staff members.

LAPCL’s current input business is strong, but the FPO deliberately keeps profit margins low to keep inputs affordable to farmers. By purchasing inputs wholesale and selling them to individual farmers with a slight price markup, LAPCL is able to cover its operating costs. With the help of GDS, it has begun producing its own brand of seeds, and has managed to distribute seeds for water-resistant crops to enhance food security in the area, which is prone to floods. The mission of LAPCL is to benefit farmers, and therefore, decisions about the variety and style of inputs are made with the participation of LAPCL members (in addition to the Board of Directors). There is an annual meeting to which all members are invited; LAPCL staff informs members of the variety of seeds available for the seasons and ask them what price they would pay for the seed if purchased from another vendor. LAPCL chooses the lowest price possible, and adds a slight markup to ensure that LAPCL as a company can break even. However, the intention is to provide inputs as affordably as possible. As a result, farmers receive fair prices, but LAPCL’s profit margins remain small.

Growing LAPCL through Collective Marketing

LAPCL has made great strides in providing access to quality, affordable inputs to farmers. With the help of agricultural extension services from GDS and quality inputs from LAPCL, farmers in the area are producing more and better crops. Most LAPCL members produce traditional staples such as wheat on 70 to 80 percent of their land, which are not high-value crops but are easy to store. They also grow smaller quantities of
LAPCL has recognized that the next step in expanding its business and improving farmer livelihoods is collective marketing to allow for scale and greater income. Currently, farmers receive low prices because they are at the bottom of the value chain and do not produce sufficient quantities individually to have market power. Processors and vendors take cuts of the final price, and therefore, every rung lower in the value chain receives a low price. Given the size of its membership and pre-existing organizational structure, LAPCL is well-positioned to aggregate output and overcome this barrier. To do so, LAPCL must make the following changes to its company: (1) increase working capital in order to provide farmers with timely payments for their products and purchase infrastructure to facilitate aggregation and high-quality products; and (2) establish itself within the value chain as a reliable, well-connected supplier of final goods in addition to inputs.

Enabling Aggregation with Timely Payment to Farmers

LAPCL recently initiated collective marketing efforts, but has been unsuccessful thus far. The most notable obstacle is that farmers want to be paid the full price in cash when they hand over their products. There will inevitably be a lag between when LAPCL pays farmers for their goods and when it sells the goods, as it will take some time to aggregate a sufficient quantity of goods from different farmers to sell to a larger buyer.
However, due to its currently small profit margin, LAPCL does not have sufficient working capital to pay farmers in full at the time of crop purchase. Furthermore, if LAPCL did pay farmers in full at the time of purchase, it would be taking on significant risk; in the event that market prices drop or it is unable to sell all the crops, LAPCL would lose money. Although farmers would be better off because of a consistent income, LAPCL would likely be unable to stay in business due to market and price risk. The most viable option to ensure cash flow for farmers while reducing risk for LAPCL is reaching an agreement with farmers in which they initially receive a certain percentage of their payment in cash, and the remaining portion in inputs to initiate the next planting cycle.

This issue also makes it difficult for LAPCL to utilize the government’s MSP system. Because the MSP system often delivers payment two weeks to a month later, LAPCL would need substantial working capital to pay farmers promptly and then collect their own payment from the government. Farmers cited comparatively prompt payments as one key reason that they sold to local traders rather than to MSP offices where both were feasible. Therefore, there is an opportunity for LAPCL to act as an intermediary between the MSP system and farmers.

However, due to its currently small profit margin, LAPCL does not have sufficient working capital to pay farmers in full at the time of crop purchase. Furthermore, if LAPCL did pay farmers in full at the time of purchase, it would be taking on significant risk; in the event that market prices drop or it is unable to sell all the crops, LAPCL would lose money. Although farmers would be better off because of a consistent income, LAPCL would likely be unable to stay in business due to market and price risk. The most viable option to ensure cash flow for farmers while reducing risk for LAPCL is reaching an agreement with farmers in which they initially receive a certain percentage of their payment in cash, and the remaining portion in inputs to initiate the next planting cycle.

**Introducing Necessary Infrastructure for Growth**

Another prerequisite for collective marketing is infrastructure that supports aggregation and consistency of inputs. Currently, LAPCL lacks a space to store crops as they obtain them from individual farmers and wait until there is a sufficient quantity to sell. Storage would also allow LAPCL to wait to sell goods when they know the market prices are high or have a stock that can be distributed regularly to an assured buyer. Furthermore, storage and transport would allow LAPCL to benefit from the MSP system, as they are necessary in order to aggregate the minimum amount of grain and take it to the procurement office.

Cereals are relatively easy to store as they are compact and do not require refrigeration. However, LAPCL has attempted to
aggregate vegetables, which are bulky and perishable, requiring large cold storage. Therefore, the investment needed to overcome these constraints is smaller for aggregating grains rather than vegetables. In addition to storage, some market relationships would require transportation; although many processors and buyers have their own trucks that can pick up goods, LAPCL-owned transportation would give the FPO more power to determine which buyers to sell to and reach buyers in more distant markets. Currently, few wholesale brands (such as ITC or Unilever) have infrastructure in Eastern Uttar Pradesh, with the closest operations being located in Kanpur or Lucknow. Transportation would allow LAPCL to reach these large buyers and obtain first mover advantage among FPOs in the Maharajganj District. Such storage and transportation investments would also have the dual benefit of acting as collateral. The LAPCL shop in Lehra Market is rented, not owned, and therefore, cannot be used by LAPCL as collateral in loan applications. Lack of creditworthiness is currently a major constraint for LAPCL, as will be discussed shortly.

Other infrastructure investments may be needed to ensure consistency and quality of products for assured buyers and regular cash flow. LAPCL has obtained shared machines to facilitate production such as a zero tiller, paddy transplanter, and drum seeder. These purchases are a first step, but LAPCL still lacks the machinery to produce the high-quality final goods desired by actors further along the value chain. For example, in a previous year, LAPCL sent potatoes to Haldiram's, an Indian snack manufacturer, for sampling to determine whether LAPCL could act as an input provider. Haldiram's was looking for a different quality of potatoes (less sugar and starch), and now LAPCL is trying to produce that type of potatoes. With assistance from NABARD, LAPCL obtained a grading machine to assess the quality of products, which will enable relationships to be built with companies like Haldiram's. However, it currently lacks the working capital and staff to run the machine. Investment in machinery to improve product quality will set LAPCL apart from individual SML farmers. Not only will LAPCL be able to improve the quality of its products, but it can also ensure that it meets the specific needs of large buyers. Mechanization is profitable, both in terms of improving

**LAPCL has obtained shared machines to facilitate production such as a zero tiller, paddy transplanter, and drum seeder.**
quality (and consequently, prices) of products as well as rent-making opportunities. However, there are operating costs associated with running the machine that require more capital than LAPCL currently possesses.

**Increasing Access to Credit and Working Capital**

In order to meet the demand by farmers for immediate payment, as well as obtain required infrastructure, LAPCL requires additional capital. The small margin generated by input sales and the low shareholder fees are insufficient for investment. GDS can provide support to LAPCL, but as a formal company, LAPCL cannot receive direct financial assistance from GDS, a non-profit organization. At times, LAPCL has requested at the annual meeting that each member contribute a small amount to make a large investment. However, these are small and marginal farmers and therefore, the amount collected is not adequate to make the types of changes LAPCL needs to grow the business.

LAPCL has been unable to access sufficient credit thus far due to lack of credit history and collateral. Small loans are fairly easy to obtain from local banks or self-help lending networks, but these amounts are insufficient to make the types of investments required for collective marketing. In order to receive larger loans from banks for the purpose of business investment, there is an extensive application process that requires a business proposal for use of funds. LAPCL was rejected when it applied through this process. LAPCL has also applied for credit through NABARD and is waiting to hear whether the loan request will be approved. LAPCL’s future growth with be contingent on obtaining access to credit, either through a formal financial institution, the government, or an informal lending network. A one-time influx of credit has the potential to jumpstart sufficient profit-making through the purchase of infrastructure that can improve quality and increase quantity.
Establishing LAPCL within the Value Chain

The value chain in Maharajganj is largely driven by entrenched networks and relationships of buying and selling. Larger actors in the supply chain, such as processors and market vendors, have established numerous connections throughout the supply chain and have built trust in terms of quality and timely payment. LAPCL’s direct competitors in the aggregation and marketing business are local traders who buy grains and vegetables from smallholders and resell them to other traders or customers such as vendors and mills. These intermediaries have well-established networks of buyers, and it will take time and effort for LAPCL to generate that level of trust.

Given the complexity of the agricultural value chain, LAPCL will need to establish and strengthen numerous relationships. In order to sell at a larger mandi independently, LAPCL will need to establish a relationship with the mandi commissioner and pay a fee. In order to sell directly to an end-buyer such as ITC or Unilever (or perhaps more realistically, a local hotel, hospital, or university), LAPCL will need to demonstrate its ability to provide consistent, quality inputs. Furthermore, there is a network of brokers who play an essential role across several levels of the supply chain, assisting processors and aggregators to determine the best prices and markets at which to sell. If LAPCL were to circumvent these processors and aggregators, it would need to find its own broker or source this information on its own.

On the other side of the value chain, competing intermediaries have extensive relationships with farmers. However, they offer the farmers very low prices, creating an opening for LAPCL to compete for farmers’ business as an aggregator. LAPCL has set itself apart from other input dealers in the eyes of farmers by putting farmer needs before LAPCL profits. It also already has the network of village distributors who visit or live in different villages to distribute inputs; these distributors can easily be taught to aggregate as well, with a small increase in their commission. Therefore, LAPCL has already created a trusted network to obtain crops, as long as it can match other
aggregators’ and processors’ ability to provide timely payment and/or credit for input purchases. The only necessary change to the aggregation process is formalizing the method of communication. LAPCL lacks a systematic approach to contact farmers and does so irregularly. If it hopes to become a sustainable business, it will need an organized database of crop-supplying members and a schedule for when to reach out to them.

If LAPCL can organize the logistics of its farmer network and establish connections with large buyers, LAPCL could simplify the value chain and offer buyers competitive prices while raising farmers’ incomes.

If LAPCL is able to overcome the barriers of credit and network access, and ultimately sell in markets as a larger entity, it can function as a profitable organization that independently improves the well-being of farmers. Self-sufficiency and sustainability are the ultimate goals. However, in the short-term, LAPCL must jumpstart the profit-making process; currently, its limited infrastructure and credit access prevents it from producing higher-quality products and avoiding fees from supply chain actors. GDS will need to support LAPCL in the short-term as it overcomes these barriers. LAPCL will need GDS to continue providing technical assistance and human resources, but GDS will also need to begin supporting LAPCL in new ways, with the intention of generating self-sufficiency in the long-term. The following section introduces recommendations for LAPCL’s short-term strategy, and the role that GDS should play in these plans.
SECTION 4

Business Strategies

- Sell Outputs to Large Agribusinesses
- Aggregate Grains for MSP Procurement
- Establish Timely Payment System
- Develop a Brand for Niche Products
- Recommended Priorities
Field research on LAPCL and broader agricultural value chains indicates that the following strategies have potential: becoming a regular supplier of crops for large buyers, aggregating grains to meet the minimum government MSP requirements, and developing a niche brand to appeal to India’s growing middle class.

An analysis of the feasibility and challenges of each of these strategies indicates that serving as a supplier for a large-scale buyer is the most viable. This section provides an evaluation of each business strategy, followed by recommended actions and investments to pursue aggregation. In the short term, LAPCL will need to build its managers’ capacity, coordinate crop choices to allow for aggregation, and identify local buyers that it can supply produce to in bulk, while increasing its income by raising profit margins on inputs. In the medium term, LAPCL can begin to sell vegetables to local buyers while developing relationships with larger agribusinesses and generating additional income from aggregating grains. Niche products present a longer-term opportunity after LAPCL has built its brand, distribution networks, and management capacity.

First, LAPCL could partner with a larger agribusiness company and serve as a supplier. This strategy has propelled other FPOs to success. For example, Mother Dairy and its vegetable and fruit arm, Safal, source locally-grown fruits and vegetables from FPOs in South India, and intend to continue expanding their work with FPOs for increased productivity and streamlined quality procurement. A partnership between an FPO and a larger company has advantages for both parties: the FPO can provide members with an assured buyer and easily collect information about demand, and the company can source from smallholders without high transaction costs by working through the FPO.

Sell Outputs to Large Agribusinesses

Larger companies can also address some of the other barriers facing LAPCL. The company is responsible for market analysis and communicates its needs to the FPO, and companies often provide training and inputs to ensure their smallholder suppliers produce crops to desired quality standards. Companies may also be able to eliminate infrastructure constraints, either by using their own storage and transport or by providing credit so that the FPO can invest in its own. However, LAPCL will still likely need a moderate amount of storage to aggregate the crops before selling them in bulk, and it will need to find a way to pay farmers promptly, despite having to wait for payment from the company (discussed below in the “Timely Payment System” section).

The central challenge to this approach is forming a relationship with an agribusiness company, which is largely out of LAPCL’s hands. Other FPOs have occasionally received support to join online exchanges to help them sell to larger buyers, as in the Jeevika project in Bihar. More often, however, companies decide that they want to source a particular product from a given area and seek out or establish FPOs to serve as their suppliers. ITC, for example, helps smallholders improve farming practices and enter their supply chain, but it selects the crops and villages it sources from and in many cases helps establish FPOs or other farmers’ organizations.

To appeal to companies seeking suppliers, LAPCL needs to be able to deliver high-quality produce in large quantities and at regular intervals. This will require a greater degree of coordination among members about what crops to produce, farming methods, and inputs. A key initial step toward forming assured buyer relationships will be to assess demand for crops that LAPCL’s members can produce and the quantity and quality that they will have to deliver to be attractive. Grading members’ crops (using LAPCL’s existing grading machine) and advising them on how to produce better-quality produce will help LAPCL make its offerings more appealing to larger partners. LAPCL will also need to strengthen its management capacity to ensure it is a credible partner for larger companies.

LAPCL should initially establish connections with medium-sized local buyers such as hospitals, universities, and...
restaurants, which have smaller farmer networks and easier requirements. Through this relationship, LAPCL can begin establishing consistent profits and demonstrate its capacity to serve as a supplier. This partnership will be helpful when seeking to work with larger agribusinesses (such as ITC and Unilever), as LAPCL will have a demonstrated history of providing regular, quality products.

Aggregate Grains for MSP Procurement

Rather than focusing on developing a partnership with a larger-scale assured buyer, LAPCL could also attempt to aggregate and sell goods for the local market. However, given the entrenched networks of buyers and sellers in the grain and produce markets in Maharajganj, breaking into this market will be difficult. The most viable avenue for LAPCL to aggregate and sell crops at the local level is the Minimum Support Price (MSP) procurement system.

Although the MSP system is intended to increase farmers’ incomes and protect against price volatility, smallholders in the villages around Pharenda have difficulty accessing the system in practice. Interviewees reported that the local procurement office requires a minimum quantity of grain, which few smallholders are able to produce. The procurement offices are also distant from farmers, who often lack the means to transport a sufficient quantity of grain. Challenges with corrupt procurement officers and delayed payments are well documented. Farmers therefore sell their grains at a lower price to local intermediaries, who aggregate it and sell it either to the MSP procurement office or larger traders or mills. There is room for LAPCL members to obtain a higher price and LAPCL to profit by aggregating grains to sell at MSP. With its strong network of farmers and willingness to offer better prices, LAPCL could take over the aggregation role that interviewees stated is currently filled by local intermediaries.

Although this is not the procurement process envisioned in existing policies, it is in line with current practices by other aggregators and does not appear to be prohibited.

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Furthermore, if LAPCL adopted this business model, it would be operating as an unofficial aggregator much like the local traders, at least in the short to medium term. Some states have adopted policies to allow FPOs to serve as official MSP procurement agents, which offers greater possibilities for scale and profit, but this model does not appear to be present in Uttar Pradesh. In the longer term, if this policy is adopted in Uttar Pradesh, LAPCL could be well positioned to serve as an official procurement agent. However, this would require a policy change that is beyond the control of LAPCL or GDS, and they should not count on it occurring in the near future.

Given LAPCL’s infrastructure constraints, this would be more feasible than aggregating vegetables without a larger market actor to facilitate storage and transport, since grains do not require cold storage. LAPCL already has access to a grading machine, and with only a limited amount of storage space and investment in packaging, LAPCL could aggregate the grains its members produce and sell them at MSP. Selling grains to the MSP procurement system would also be simpler than attempting to build the network of connections with brokers and traders required to sell to mills or other parts of the private supply chain. However, payment delays would be a central challenge to this strategy, and given the relatively small wedge between the MSP and local market price (interviewees stated it was approximately Rs. 2-4 per kilogram), it would be difficult for LAPCL to make significant profits while offering remunerative prices to farmers.

Furthermore, if LAPCL adopted this business model, it would be operating as an unofficial aggregator much like the local traders, at least in the short to medium term. Some states have adopted policies to allow FPOs to serve as official MSP procurement agents, which offers greater possibilities for scale and profit, but this model does not appear to be present in Uttar Pradesh. In the longer term, if this policy is adopted in Uttar Pradesh, LAPCL could be well positioned to serve as an official procurement agent. However, this would require a policy change that is beyond the control of LAPCL or GDS, and they should not count on it occurring in the near future.

Establish Timely Payment System

If LAPCL pursues aggregation, either as a supplier for a larger company or to sell to the MSP procurement system, it will need to overcome the challenge of delivering timely payments to farmers. As discussed in the section on LAPCL and its current business model, payment delays have been a key obstacle to collective marketing thus far. However, any model that relies on collecting crops for bulk sales will inevitably involve a lag...
between when LAPCL purchases goods from farmers and when it receives payment from its larger buyer.

There are a few potential methods to overcome this challenge. In the long term, LAPCL could obtain sufficient credit to provide full payment to farmers upon receiving the goods. There is significant risk involved in this strategy, in the event that LAPCL is unable to sell certain goods or the market price drops before LAPCL sells it. Once LAPCL has generated sufficient profits to maintain some savings, it may be able to accept this risk. Furthermore, as a social enterprise that prioritizes the livelihood of farmers over and above profits, this risk may be in line with LAPCL’s value proposition. There may also be opportunities to obtain external insurance that would assist in hedging against market risk, and to use technology such as mobile phones to deliver instant payments.

However, in the short-term, this strategy is infeasible given LAPCL’s small profit margin; if it took on such significant market risk, LAPCL as an organization could collapse with one cycle of low prices or sales. Therefore, a short-term strategy could entail paying farmers a pre-determined percentage in cash for the goods and providing inputs to begin the next planting cycle. Farmers stated that one of the main reasons they require timely payment (and are willing to sell at a low rate for a full cash payment) is the need to begin their next planting cycle. If they wait too long to purchase inputs and plant, they risk a bad harvest. Therefore, providing inputs as in-kind compensation for a portion of the payment could address this need while reducing LAPCL’s market risk.

These short-term strategies would require a significant amount of trust between farmers and LAPCL. Fortunately, this trust has been established throughout the lifetime of the organization. Beginning with small purchases from farmers and successful repayments as soon as the goods are sold will generate trust in the idea of aggregation. If LAPCL is able to offer farmers a slightly higher rate than other local buyers and gain a reputation for timely repayment, this strategy could become commonplace.
As incomes in India rise, demand for specialized products from the growing middle and upper classes is increasing. Organic produce and health foods are fast-growing segments of the market, and sourcing from smallholders appeals to consumers concerned with the social and environmental impacts of their purchases. These premium markets can offer higher prices without requiring large volumes, particularly if an FPO develops a distinctive brand. Other FPOs have thrived by specializing in niche produce, establishing a brand, and marketing to socially conscious consumers.

There are numerous short-term barriers to the success of this strategy, however. Transitioning to organic farming would take a minimum of three years, since farmers around Pharenda practice chemical-intensive agriculture and it takes time for the chemicals to leave the soil. Farmers in the area also do not specialize in a single crop or produce specialty products that have been successful elsewhere. (GDS is interested in promoting cultivation of moringa, a tree whose leaves are a popular health food, but this is in the very early stages, and GDS is more interested in the possibility of self-consumption to improve household nutrition.) There would be significant costs associated with switching to organic cultivation or investing in a new niche crop, and the poor smallholders that LAPCL works with do not have the resources to bear those costs themselves. Farmers also would face increased risk if they focused on niche products instead of cultivating a diversified portfolio of food, which can be consumed if there is an unexpected drop in market demand. LAPCL lacks the capital to support these investments or mitigate the risk by guaranteeing a price, so without external support, a dramatic shift in cultivation practices or crops is unrealistic.

In addition, given the distance from Maharajganj District to major cities with substantial markets for niche products, it is most feasible to begin a transition to niche products once LAPCL has established relationships with companies that can get the products into the hands of high-end consumers and
assist with branding and marketing. Building these relationships through produce aggregation could help assure farmers that there would be a market for a new niche crop and increase their willingness to change their cultivation patterns.

Although this strategy is unrealistic for LAPCL in the short to medium term, it offers some long-term potential. An initial emphasis on aggregating produce would give LAPCL time to develop a distribution network and build its branding and marketing capacity. As LAPCL connects with larger markets, it will gain access to information about demand and can make an informed decision about whether to pursue a specialized crop such as moringa or encourage members to transition to organic farming. With increased profit margins, LAPCL could also offer incentives for members to cultivate a niche crop. If aggregation of produce proves highly profitable, moving into niche products might not be necessary. However, niche products could offer a next step to further improve LAPCL’s profitability after establishing a sound aggregation business.

Recommended Priorities

Based on our analysis of the viability of each of the potential business models available to LACPL, we recommend that the organization emphasize aggregation and collective marketing of produce to large-scale buyers. This strategy offers better potential returns to LAPCL and its members than focusing exclusively on aggregating grains, and it aligns with their existing crops and activities better than a short-term emphasis on niche products. It will take several years and significant investment for LAPCL to develop the management capacity, relationships, and infrastructure to successfully market produce. External sources of financing (such as loans from NABARD) could help cover investments and operating costs, but LAPCL can also raise funds by increasing the prices of inputs for non-members and aggregating grains as an initial step. Once LAPCL has developed its brand, a network of partnerships, and strong management capacity, organics and niche products offer a potential long-term opportunity. A six-year strategy plan for LAPCL can be found in Appendix C.

Once LAPCL has developed its brand, a network of partnerships, and strong management capacity, organics and niche products offer a potential long-term opportunity.
Conclusion
FPOs offer great potential to improve the incomes of India’s small and marginal farmers, but they require substantial support. Existing literature and field research focusing on LAPCL highlight the challenges of developing managerial capacity, accessing credit, and integrating FPOs into larger agricultural value chains. Although some programs exist to assist FPOs in developing viable business models and expanding their reach, additional support will be required for them to live up to their promise.

We believe that in the near term, LAPCL’s best option is to work toward a partnership with a larger company, in the form of either formal contract farming or an assured buyer relationship. This strategy would offer LAPCL’s members a larger and more lucrative market for their crops, provide clear information about market demand, and help overcome existing credit and infrastructure constraints. For this strategy to succeed, we recommend that LAPCL prioritize building its managers’ capacity, coordinating members’ crop choices and identifying local buyers in the short while using input sales, loans, and proceeds from grain aggregation to invest in storage, transport, and packaging. In the medium term, LAPCL should expand its network from local buyers to larger agribusinesses, while further professionalizing its operations and investing in additional infrastructure. However, LAPCL requires substantial assistance to position itself as a credible partner for buyers, and a credible borrower for financial institutions. It will need continued capacity building in business management and marketing, and successfully forming a relationship with a larger buyer will also likely require external facilitation. We recommend that GDS’ support to LAPCL prioritize these areas, but a broader effort to provide these services to FPOs in Eastern Uttar Pradesh would be immensely valuable.

The challenges LAPCL faces in professionalizing and scaling up its business are common across FPOs, and many similarly positioned FPOs could benefit from extensive technical support. Training in accounting, business planning, marketing, and related skills is essential for emerging FPOs to take their businesses to the next level. FPOs would also benefit from assistance in developing credible business plans and loan
A program to support FPOs and help them learn from experts and one another would be offer significant benefits to smallholders like those our team met in Maharajganj. Given the potential of FPOs to improve farmers’ livelihoods, we recommend that the Government of India, international donors, and partners like Athena Infonomics prioritize support to FPOs through comprehensive technical assistance. To help FPOs succeed, an effective technical assistance program should 1) provide FPO leaders with holistic training in business skills and agricultural practices, as well as customized business advice over the medium to long term; 2) facilitate relationships between FPOs and private agribusiness companies; and 3) work with key stakeholders, particularly the state government and agribusiness sector to reshape the institutional landscape to provide better opportunities for SML farmers.

Over the next several years, Athena Infonomics can play a vital coordinating role by aligning each actor’s efforts, easing access to existing support programs and services, and delivering high-quality technical assistance to position FPOs for growth.

Strengthening FPOs in Uttar Pradesh will be a gradual and difficult process. Improving FPOs’ managerial capacity and the marketability of their members’ crops will take several years of close engagement, tailored to each FPO’s circumstances. However, the key players—the government, the private sector, and the farmers themselves—have expressed commitment to using FPOs to integrate smallholders into agriculture value chains. To succeed, they need a cohesive, holistic framework to get emerging FPOs off the ground. Over the next several years, Athena Infonomics can play a vital coordinating role by aligning each actor’s efforts, easing access to existing support programs and services, and delivering high-quality technical assistance to position FPOs for growth.
Appendix

- Appendix A: PESTEL Analysis of LAPCL
- Appendix B: LAPCL's Market Position
- Appendix C: Six-year LAPCL Strategy
- Appendix D: Interviews and Focus Groups
## Appendix A: PESTEL Analysis of LAPCL

### Political

<table>
<thead>
<tr>
<th>Complex government markets</th>
</tr>
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<tbody>
<tr>
<td>Government markets have entrenched actors and competition that prohibit smaller value chain actors from selling without paying significant fees.</td>
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</table>

### Economic

<table>
<thead>
<tr>
<th>Opportunity to meet Minimum Support Price</th>
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<tbody>
<tr>
<td>LAPCL has the potential to meet the quantity requirement for MSP through aggregation but must overcome working capital constraints, as MSP does not facilitate payment immediately and LAPCL must pay farmers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lack of collateral</th>
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<tbody>
<tr>
<td>LAPCL shop is rented, not owned and machinery is currently too small-scale to act as collateral for formal loans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Small shareholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares are 100 rupees, and shareholders cannot contribute purchase more than one share because LAPCL doesn't want big farmers as members or the aggregation of shareholder power</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Low profit margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary goal of LAPCL is to improve livelihoods of farmers, and therefore, any profit generation is solely for sustainability of the organization for continued assistance to farmers.</td>
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</table>

<table>
<thead>
<tr>
<th>Limited working capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to obtain loans and low profit margin prevent LAPCL from making investments in infrastructure or providing full payments to farmers at time of collection of goods</td>
</tr>
</tbody>
</table>

### Social

<table>
<thead>
<tr>
<th>Farmer trust</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAPCL is farmer-founded and farmer-run, and therefore, has developed trusting relationships with farmers, which will facilitate collective marketing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Female leadership</th>
</tr>
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<tbody>
<tr>
<td>Requirement that at least three LAPCL board members be women to ensure participation of women in leadership</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Human capital</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAPCL leadership feels confident in knowledge of agricultural practices, but requests training in business and marketing skills</td>
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</tbody>
</table>

### Technological

<table>
<thead>
<tr>
<th>Quality management</th>
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<tbody>
<tr>
<td>In possession of grading machine to determine quality, but lacks human capital and finances to run it</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Productive farming tools</th>
</tr>
</thead>
<tbody>
<tr>
<td>LAPCL owns a zero tiller, paddy transplanter, drum seeder, and a few other pieces of machinery that enhance the productivity of planting and cultivation, but quantity of</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lack of storage</th>
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<tbody>
<tr>
<td>LAPCL does not have cold storage for vegetables or normal storage for grains, and therefore, cannot aggregate and/or wait for high prices</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lack of transportation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers must individually take goods to nearby market or work with intermediary to transport goods to further markets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mobile penetration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most farmers have cell phones (not smartphones) and LAPCL keeps a list of phone numbers</td>
</tr>
</tbody>
</table>

### Environmental

<table>
<thead>
<tr>
<th>Flood prone area</th>
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<tbody>
<tr>
<td>Water logging during monsoon season can harm productivity and incomes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Necessity of irrigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collectivization could provide access to government-irrigation schemes (which smallholders cannot obtain on their own), particularly solar-powered pumps to reduce costs associated with diesel pumps</td>
</tr>
</tbody>
</table>

### Legal

<table>
<thead>
<tr>
<th>Limited financial support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrictions in terms of financial support allowed by GDS (e.g. GDS cannot give or loan money to LAPCL)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Registration as FPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Being registered under the Companies Act allows LAPCL profit-making potential and the ability to sell in different areas</td>
</tr>
</tbody>
</table>
Appendix B: LAPCL’s Market Position

### Competitive Advantages

**Social Mandate:** As a social enterprise dedicated to serving farmers, LAPCL is willing to accept lower margins than the local traders that it would be competing with to aggregate and market produce and pass along more of the gains to the farmers.

**Connections with Farmers:** LAPCL already has 661 members who participate in the annual general meeting and a larger network of customers of its input business. The system of “key people” who collect and fill orders at the village level can easily be leveraged to collect crops and communicate information about demand. LAPCL’s reliance on farmers’ social networks and reputation as a trustworthy input dealer gives it a strong platform to expand into aggregation and marketing and to increase the scale of its operations.

**Access to External Support:** LAPCL currently receives substantial support from GDS, and as an FPO, it is also eligible for government support programs. Connecting farmers to other services as well as markets gives LAPCL a significant advantage. Access to support services can also help LAPCL improve its business practices and expand into new markets.

**Appeal to Socially-Conscious Buyers:** LAPCL can position itself as a socially responsible intermediary, making itself more attractive for conscientious consumers and large companies that cater to them. LAPCL is much more likely than local traders to appeal to companies that emphasize corporate social responsibility in their sourcing.

**Integration with Input Business:** In addition to building its network of farmers, LAPCL’s existing input business can help it ensure farmers have the supplies they need to produce crops that meet market demand. The input business may also help reduce the need for working capital, as farmers can be offered credit for inputs in exchange for their produce rather than paying entirely in cash.

### Disadvantages

**Lack of Connections:** Marketing grains and vegetables in Maharajganj relies on a network of connections to brokers and larger-scale traders. As a new entrant into this market, LAPCL does not have the networks that the existing traders do - and these networks are unlikely to welcome the competition. LAPCL will need to identify different markets (for instance as a supplier to a larger company, rather than aggregating and selling produce in local markets) to overcome this challenge. If LAPCL draws traders’ suppliers away from them in large numbers, they may also face a backlash.

**Business Management:** Unlike local traders, LAPCL’s staff largely does not have formal education or training in business management. Although GDS has been providing training in basics such as accounting and LAPCL’s current CEO is a GDS staff member with a Master’s degree, over the longer term, LAPCL will have to strengthen its management capacity in order to compete.

**Access to Finance:** Well-established traders have sufficient assets to easily access credit from formal financial institutions. In contrast, access to finance is LAPCL’s largest overarching challenge. To successfully compete, LAPCL will need assistance producing credible business plans to obtain loans from formal banks or navigating government lending programs.

**Infrastructure:** LAPCL’s storage and transport constraints place it at a disadvantage relative to the traders it competes with. This will have to be overcome either by obtaining access to finance to invest in these capabilities or partnering with a larger company that can offer the necessary logistical support to store crops in large quantities and transport them to buyers.
### Appendix C: Six-year LAPCL Strategy

<table>
<thead>
<tr>
<th>Actions to Take</th>
<th>Investments to Make</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain business/marketing training from GDS staff</td>
<td>Storage for aggregated cereals</td>
</tr>
<tr>
<td>Align farmers on crops grown, with an initial emphasis on cereals for sale and vegetables for subsistence</td>
<td>Truck for transport to nearby buyers</td>
</tr>
<tr>
<td>Network with local buyers which buy bulk (e.g. hospitals, schools, etc.)</td>
<td>Human capital for grading machine</td>
</tr>
<tr>
<td>Raise prices of inputs for non-members to incentivize membership and increase profit margin</td>
<td>Working capital for timely payment to farmers</td>
</tr>
<tr>
<td></td>
<td>Packaging for LAPCL output (utilizing similar branding from input packaging)</td>
</tr>
</tbody>
</table>

**SHORT-TERM (1-2 years)**

- Network with larger, more distant buyers (e.g. ITC, Unilever, etc.)
- Aggregate vegetables for bulk sale
- Switch to non-chemical inputs to cleanse land for growing organic products in future
- Utilize MSP as initial, regular buyer for cereals while relationships are established with private sector

**MEDIUM-TERM (2-4 years)**

- Cold storage for aggregation and sale of vegetables
- Chemical-free (organic) inputs
- Guaranteed buyer provides necessary transport and storage infrastructure
- Consistent salary/payment for village-level aggregators

**LONG-TERM (4-6 years)**

- Introduce niche and/or organic products
- Replace GDS-provided CEO with current LAPCL member
- Mobile system for payments to farmers and connection to electronic markets
- Salary for CEO
Appendix D: Interviews and Focus Groups

Expert Interviews

Dr. Ashesh Ambasta  
ITC Limited

Dr. Pratap Birthal  
National Institute of Agricultural Economics and Policy Research

Dr. P.K. Joshi  
IFPRI

Dr. Anjani Kumar  
IFPRI

Sitaramachandra Machiraju  
World Bank Group,  
Agribusiness Specialist

Pushina Kunda Ng’andwe  
World Bank Group,  
Rural Livelihoods

Dr. Devesh Roy  
IFPRI

Dr. Sukhpal Singh  
Indian Institute of Management Ahmedabad (IIMA)

Stakeholder Interviews & Focus Groups

All interviews and focus groups took place in the Maharajganj District of Eastern Uttar Pradesh

Interviews

- 6 Vendors at Mandi
- 2 Bank Managers
- 2 Micro-finance Institution Field Officers
- 1 Input Dealer
- 1 Grain Dealer
- 1 Flour Mill Manager

Focus Groups

- 2 All-female Farmers SHGs
- 1 Mixed-gender Farmers (non-SHG)
- 1 LAPCL Staff Members
- 1 LAPCL Board Members
- 1 Livestock Paravets
- 1 SHG Federation Managers
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