

# THE MANN DESHI KISAN PRODUCER COMPANY

THE 2019 INDIA GLOBAL LEADERS PROGRAMME



# Table of Contents



Sections	Page Number
Executive Summary	3
Introduction and Background	6
Current Situation and Challenges	12
Business Model	15
Governance and Organisation	26
Operations	34
Sales and Marketing	49
Social Impact and Community Benefits	55
Financial Analysis	59
Policy Recommendations	66
Risk Analysis and Mitigation	69
Implementation Plan	73
Conclusion & Recommendations	76



# Executive Summary

## Overview of Challenge

Smallholder farmers around the world — not just in India — are price takers. This leaves them at the whim of market dynamics, reducing their income stability. This is compounded by poor infrastructure, small landholdings, and limited access to capital, expertise and information.

According to the World Bank, 66% of India's population — or 880 million people — live in rural areas. 70% of India's rural households rely directly on farming and agriculture for their livelihood. Despite this, agriculture's contribution to GDP has decreased, from 42% in 1960 to 15% today. But unlike other developing economies who go through this transition, India's agriculture still employs largely the same number of people: in other words, agricultural productivity and incomes are falling.

The country's population, which is growing both in size and in average income, will consume more food in the future. Demand is expected to increase by 400 million tons by 2025.

The Indian government has set an aggressive target of doubling farmer incomes by 2022. But national policies are only part of the solution. Innovative business models, rooted in local communities, are needed to increase farming incomes from the bottom-up.



**Smallholder farmers are trapped in a commoditised marketplace with little leverage.**

# Executive Summary

## The Farmer Producer Company

One mechanism to improve the livelihood of farmers is to organise them into a **Farmer Producer Company**, which would improve access to inputs, markets, capital and technology.

Organising farmers helps farmers by increasing their market power. As a collective, farmers can purchase inputs at reduced prices, and demand higher prices for their produce. They can also pool resources to achieve economies of scale, purchase equipment, and share expertise.

A Farmer Producer Company provides a structure for farmer organisation by providing tangible benefits to organisation: **increased produce prices, access to lower-cost inputs and equipment** and most importantly **dividends from the Company**. As shareholding members, farmers have a direct stake in the success of the FPC.

A sustainable and modern agriculture sector will contribute to more stable incomes, which in turn will feed into the community. Better agricultural opportunities will encourage more people to stay in or return to the farming sector, creating more vibrant rural communities.



**Farmer Producer Companies offer a mechanism for organising farmers and providing income stability.**

# Executive Summary

## Development Proposal

The Global Institute For Tomorrow partnered with the **Mann Deshi Foundation** to help the recently-established **Mann Deshi Kisan Producer Company** (hereafter referred to as the “Company”), which will be fully owned by farmer-producers in Satara District.

The Company will act as an interface between farmers and downstream buyers, integrating farming households more closely into the value chain. The Company would purchase produce from farmers at no less than a minimum guaranteed price. Once local needs are met, the Company will package and process the surplus for sale in external markets. Tighter links to the market, reduced wastage and product differentiation would ensure higher produce prices, and thus higher and more stable farmer incomes.

The Company would offer numerous pre-harvest services to encourage membership. Prime among these are **Demand Forecasting, Produce Planning** and **Collective Farming**. Access to lower-cost inputs, expertise, and equipment rental and leasing will also be provided. The Company will also introduce a number of ecological restoration schemes to ensure the long-term viability of the community. Member farmers will be required to support these initiatives as a condition of their membership. These schemes will include a **tree-planting scheme** and a **water-management scheme**.

The Company will provide several benefits to member farmers and the wider community. Membership will lead to higher and more stable farmer incomes. By extension, the wider community will see greater economic opportunities, which may encourage people to stay, or even to return to, the Mann area. Finally, improved resource management will ensure that all farmers — regardless of wealth — can work their land.

The Company is expected to be profitable, with pre-tax revenue and profit estimated to reach INR 32,000,000,000 (USD 463,000,000) and INR 3,000,000,000 (USD 43,400,000) respectively by Year 5.

**The Mann Deshi Kisan Producer Company directly targets key challenges faced by Mann’s smallholder farmers.**

# INTRODUCTION AND BACKGROUND





# The Global Leaders Programme



The Global Institute For Tomorrow (GIFT) is an independent pan-Asian think tank that provides content-rich and intellectually challenging executive education from an Asian worldview. GIFT's methodology invites participants to build greater self-awareness and test personal resilience whilst creating robust new business models linked to contemporary challenges and opportunities.

The **Global Leaders Programme (GLP)** is GIFT's flagship experiential programme designed for managers from leading global organisations to think critically about the drivers of change in the 21st century and develop new business models that address the defining challenges of our times.

# Project Team

The team consisted of twenty-six participants from thirteen organisations and twelve countries, each bringing experiences from different cultures, backgrounds and expertise. Participants joined the Global Institute For Tomorrow's 62<sup>nd</sup> Global Leaders Programme in Hong Kong and Maharashtra in late February 2019.

The project team worked to produce business recommendations for the Mann Deshi Foundation to create a commercially-viable **FPC** that could develop opportunities for the region's farmers.





# Project Partner

Mann Deshi — translated as “the people of Mann [Taluka]” — was founded in 1996 by Chetna Gala Sinha. Chetna was inspired by stories of rural women in the Mhaswad region who found it difficult to open savings accounts due to rejections from formal banking institutions. Now, Mann Deshi operates in the states of Maharashtra, Gujarat and Karnataka, and aims to reach over a million women by 2022.

The **Mann Deshi Mahila Sahakari Bank** was founded to address a lack of access to formal financial institutions, and was targeted at rural women who needed a safe place to save money. The Bank tailors its products for rural women micro-entrepreneurs. Since its founding, the Bank has opened nearly 100,000 accounts.

The **Mann Deshi Foundation** supports and extends the social mission of the Mann Deshi Bank, helping address needs beyond financial access. The Foundation’s flagship product are its business school programmes, which aim to provide rural women micro-entrepreneurs with theoretical and technical entrepreneurial skills.

Finally, the Mann Deshi Foundation runs several supplementary initiatives, ranging from a goat doctor programme aimed at rural women to sponsored sports programmes for local high-performing athletes.



## Agricultural Initiatives

Mann Deshi launched a pilot “Farm to Market” Programme in 2017, which is the predecessor to the Mann Deshi Kisan Producer Company. The pilot reached around 1200 farmers in 40 villages and facilitated approximately INR 43,000,000 (USD 600,000) in sales. Farmers’ income improved by around 5-10%.

**The Mann Deshi Foundation has built a strong community brand that can be leveraged for other initiatives.**

# Scope of Project

## Programme Objectives

1. To produce a business plan to launch the **Mann Deshi Kisan Producer Company Ltd.** (“the Company”), a company jointly-owned by producers in Mann Taluka.
2. To organise producers and provide the services to support farmer production and village processing, and to develop distribution channels and a customer base locally through the Company.
3. To leverage the resources of Mann Deshi Bank and Mann Deshi Foundation to empower the local community and create an inclusive value chain to improve both farmers’ quality of life and the level of sustainable food production.



## Methodology for Field Project

- Site visits, meetings and focus groups with a diverse array of stakeholders
- Information gathering and analysis, using farmers and traders as a primary source for data.

## Key stakeholders include:

- Farmers from both small and large farms
- Agricultural processor and import/export company
- Local traders
- The Nimbkar Agricultural Research Institute
- The Mann Deshi Bank and Mann Deshi Foundation

## Outcomes

- Development of a business plan to implement the **Mann Deshi Kisan Producer Company** in Maharashtra State.
- Presentation of highlights of the business plan to representatives from the government and financial institutions.

# India and Maharashtra



With a population of 1.3 billion and being the third largest economy (in terms of purchasing power) in the world, India's growth and achievements in the last 65 years since independence has significantly transformed the country's agriculture, services and industrial sectors.

Maharashtra is India's wealthiest and most industrialised state, contributing around 15% of the country's GDP. The state per capita income, at US\$10,200, is 40% above the national average.

While Maharashtra is India's most industrialised state, agriculture remains the main occupation for its people. Major food crops are wheat, rice, sorghum, millet and mango, while major cash crops are cotton and sugarcane. Weather patterns vary across the state: the coastal and northern regions of the state receive large amounts of rainfall, while central Maharashtra has much more unstable rainfall patterns.

The state is India's largest fruit producer, growing 78% of India's grapes, 75% of its bananas and mandarin oranges, 63% of its onions and 42% of its tomatoes. In addition, 90% of India's mango exports come from the Maharashtrian coast.

**India presents many opportunities for innovative business and social enterprise solutions to thorny development issues.**



# CURRENT SITUATION AND CHALLENGES



# Challenges Faced By Farmers

70% of India's rural households rely directly on farming and agriculture for their livelihood. Despite this, agriculture's contribution to GDP is decreasing, from 42% in 1960 to 15% today. But unlike other developing economies who go through this transition, India's agriculture still employs largely the same number of people. Difficulties with Indian agriculture are not just faced by smallholder farmers: only a third of India's agricultural companies have turned a profit in the last five years.

## Small holdings

The average size of Indian farms is 1.16 hectares, less than half the size it was forty years ago.

## Fragmented Value Chain

The region has no storage, packing or processing facilities. This means farmers must sell their produce quickly, without added value and at risk of wastage.

## Poor information

Much of the margin between farm-gate and end-consumer is captured by the many traders and distributors in the current value chain.

## Small holdings

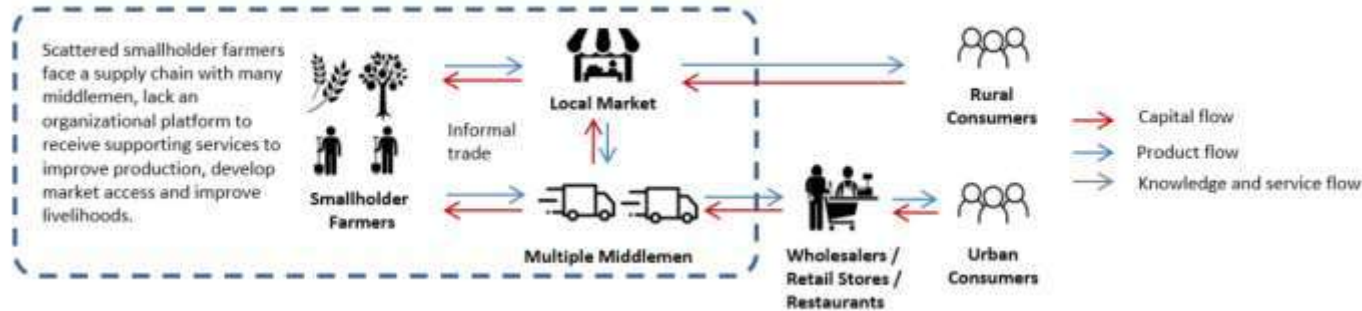
India's farmers have poor access to market information, relying entirely on past performance and word-of-mouth when making planting decisions.

## Infrastructure

Farmer incomes strongly depend on water availability. Over-exploitation has dramatically reduced water tables throughout the Mann region, leaving poorer farmers with unproductive land.

**Indian agriculture faces a numerous array of challenges, which requires a multi-faceted solution.**

# The Fragmented Farmer Produce Supply Chain



The current supply chain provides individual farmers with little market power, which forces them to sell their produce at low prices.

Farmers sell their produce in a travelling weekly local market. After serving local consumers, surplus produce is then sold to traders for delivery to other markets. Due to the lack of local storage capacity and the cost of transporting goods back home, any unsold produce must be thrown away. Thus, in order to capture any revenue, farmers sell their surplus at steep discounts, even sometimes below the cost of production.

There may be several steps between the farmer and end-consumer, which increases the chance that produce is damaged or lost in transit, reducing productivity further.

Wastage along the agriculture value chain is estimated to be as high as 60% due to poor harvesting practices, a shortage of farm infrastructure, and the multitude of actors in the chain.

**A dispersed supply chain reduces farmers' market power, putting pressure on prices and margins.**



# DEVELOPMENT MODEL



# Problem Statement: Short-Term vs. Long-Term

A harsh environment reduces food and income security for Indian farmers. These environmental issues — drought prime among them — are not short-term emergencies, but are instead long-term structural issues that must be resolved if farmers are to thrive.

## Short-Term

Any initiative in the short-term must improve the income of farmers, provide them with more accurate information, and improve their expertise to be able to farm more efficiently.

## Long-term

The ecology of Mann Taluka must be restored after decades of over-exploitation. This will require a structural reform of the local community, and initiatives to encourage more sustainable and responsible use of local resources, especially water.



**Environmental challenges must be tackled as part of the development model, not left as a short-term emergency response**



# Problem Statement: Internal vs. External

Any socially-driven agricultural enterprise must work with, not against, existing local communities and practices. Thus, it must have twin objectives: an **internal one** targeted at the local economy, and an **external one** targeted at markets further afield.

## Internal

Farmers must be able to grow enough produce to provide for themselves, while other residents of the community must be able to get their produce directly or almost-directly from farmers themselves. Thus, a **vibrant local agricultural economy** must be built and sustained.



## External

Once local needs are met, the surplus must be transported to external markets. As much of the margin gained as possible must be captured by the enterprise and distributed amongst farmers. Wastage must be reduced, and value-added processing and packaging needs to be explored.



Focus must be internal first, external second.



# Introducing the Kisan Producer Company

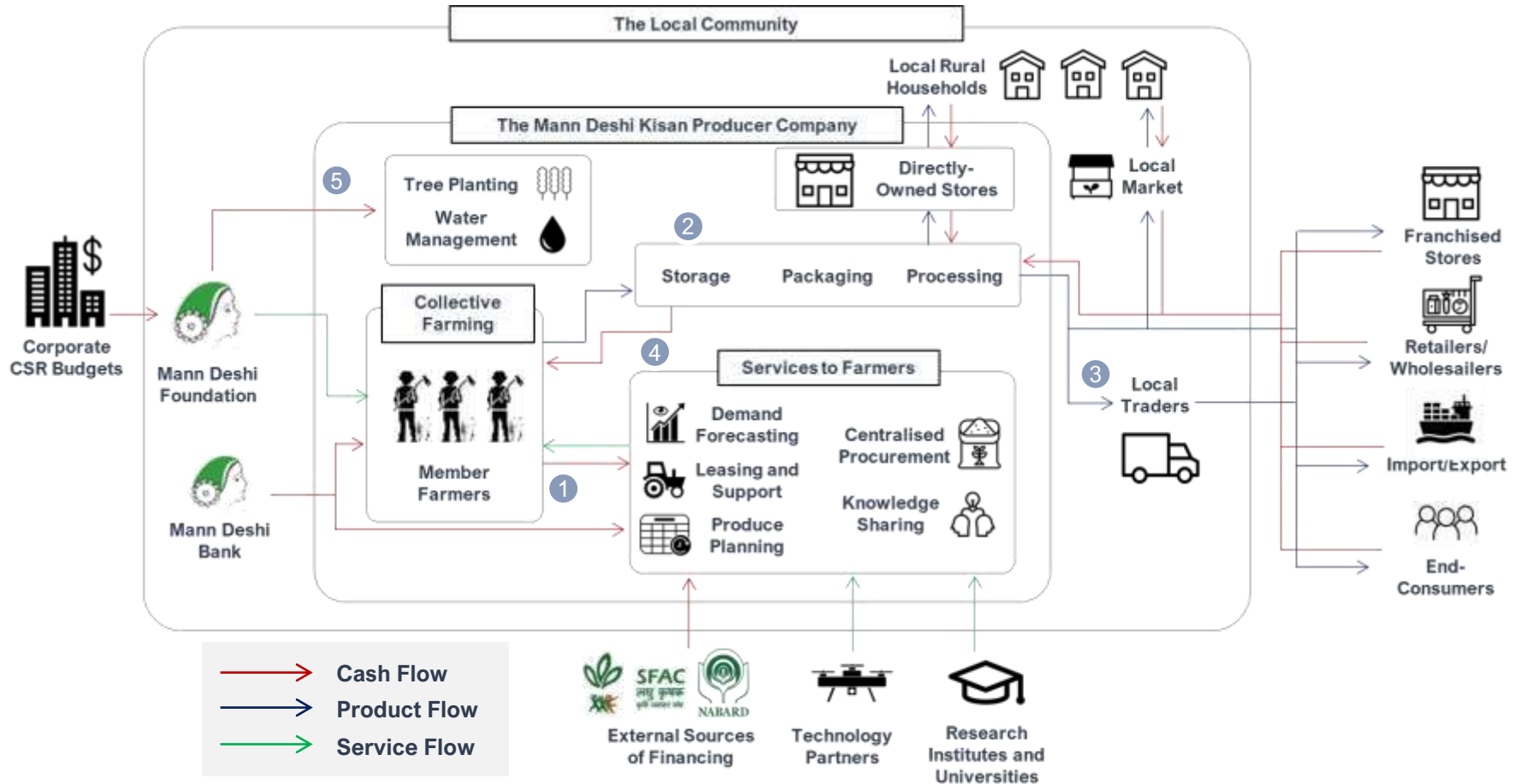
The **Mann Deshi Kisan Producer Company** will target the multitude of challenges faced by smallholder farmers throughout the Mann Taluka region.



- The first objective of the Company is to develop the local economy, ensuring that local production and consumption needs are met. Once those are fulfilled, the second objective of the Company will be to transport the remaining surplus to external markets in Maharashtra and beyond.
- Farmers must work together if they are to increase their production and improve quality. A Farmer Producer Company provides a vehicle to organise farmers and ensure that benefits are distributed amongst the membership.
- Farmers rely on past performance and word-of-mouth when making planting decisions, which means an over-reliance on volatile cash crops over stable staple crops. Demand forecasting, backed by powerful data analysis, can help farmers make better planting decisions while also helping the Company with strategic planning. By working with technology partners, the Company can help farmers to manage and optimise their planting and cultivation.
- By purchasing goods at a previously-agreed upon price, the Company can guarantee a measure of income stability for its members. Future investments in processing and packaging will allow farmers to increase the value of their surplus produce.
- Farmers cannot succeed in the long-term if the trend of local environmental degradation continues. Thus, the Company must include environmental restoration as part of its core initiatives.

**If successful, elements of the Company can be replicated in other agricultural regions in India and beyond.**

# Proposed Business Model



# Proposed Business Model: Rationale

1 The Company will attract member farmers by providing a wide array of farming services, including equipment leasing, access to storage, and a technological platform with demand forecasting and produce planning functions.

The Company will source capital from its shareholder farmers, and agricultural institutions.

The Company will partner with both technology companies and academic/research institutes to build its technology and knowledge-sharing platforms.

All these services will be used to build membership in the Company.

2 The Company will purchase produce from member farmers at no less than a minimum guaranteed price (determined by the demand forecasting model). Member farmers must sell their produce exclusively to the Company.

The Company will invest in local storage, packaging and processing. This will both reduce wastage and increase the value of produce.

Produce will first be sold in both local weekly markets and stores directly-owned by the Company. These stores will serve the local community and ensure that local needs are met.

3 Surplus left over from local sales will be sold to external markets. The Company will both transport them directly and partner with existing traders, leveraging their connections.

The Company will package and process some of the raw produce and mark it with the Mann Deshi Kisan Company logo and brand.

The Company will start with sales to existing distributors, retailers and wholesalers. Future plans will include sales of both raw and branded produce to import/export companies; the establishment of franchise stores in nearby urban markets; and the development of an e-commerce platform to sell directly to consumers.

**Offer both pre- and post-harvest services to farmers, in exchange for exclusive purchasing rights for produce.**



# Proposed Business Model: Rationale

- 4 Revenues from sales will be re-invested in new member outreach, development of new strategic partnerships, and further local processing and storage capacity.

The remaining profits will be disbursed as dividends to its member farmers. This ensures that farmers remain owners of the Company, and have a financial stake in its success.

- 5 As a requirement of membership, member farmers will need to engage in two **ecological restoration** initiatives: a tree-planting scheme and a water-management scheme.

Member farmers will be required to plant ten trees each month, either on their own land or on land provided by the Company.

Member farmers will also be required to follow a water management system that will allow for sustainable water use and the revitalisation of groundwater sources.



Revenues to be invested in member outreach, further processing, and ecological restoration to ensure long-term growth and viability.

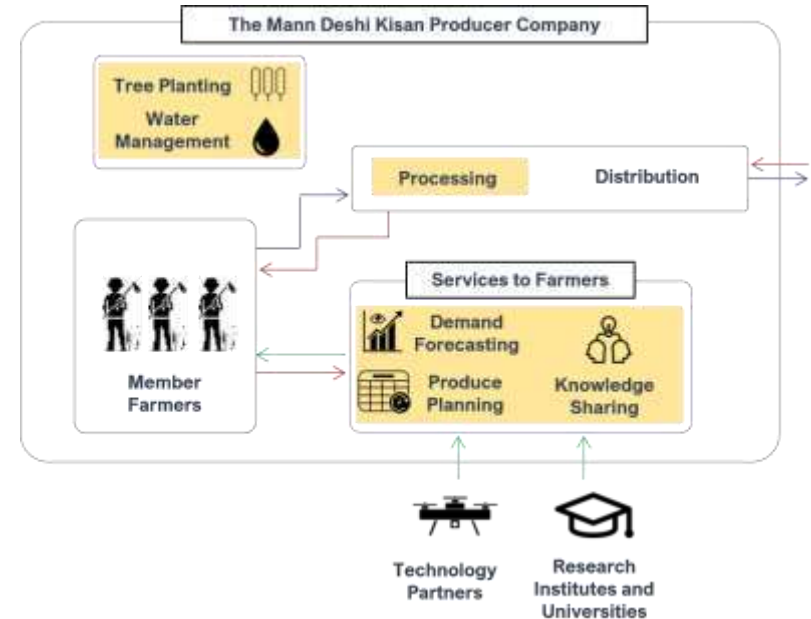
# Value Proposition

The **Mann Deshi Kisan Producer Company** will have foundations in three key areas to build a vibrant farming community and drive higher incomes for farming produce.

The Company will develop a full technology platform with **demand forecasting** and **produce planning** functionality, ensuring that member farmers are making planting and production decisions with the fullest information possible.

The Company will invest in local processing units in order to add value and achieve higher incomes for its farmers. Packaging will reduce waste, while processing will create a differentiated product base that can be separated from the agricultural commodity market into sectors where farmers can have more leverage.

Finally, the Company will build a viable agricultural community over the long-term through strict ecological restoration programmes.



The value provided by the Company can be split into three areas: pre-harvest services, post-harvest services and ecological restoration

# Key Functions of the FPC

## Forecasting and Planning

Farmers do not have enough information to make accurate planting decisions, nor do they have access to the tools and frameworks that would help them manage resources and practice sustainable farming. They also do not have access to the latest agricultural equipment and expertise.

The Company will develop its **own model of the local agricultural economy**, based on historical and current price data, that will help forecast market prices. This will help inform planting decisions by farmers, as well as the minimum guaranteed price offered by the Company.

The Company will also develop an **accurate weather model**, placing weather stations throughout the region to capture microclimates, as well as use **mapping** to capture both geographical features and water sources.

Finally, the Company will offer tools and frameworks to help farmers plan their planting and crop rotation schedules, making it easier for them to practice the necessary techniques to both increase yields and farm sustainably.

## Collective Farming

Currently, farmers holdings are too small to farm effectively. They do not have enough capital to lease equipment. Finally, risk is not shared between farmers, which pushes them to both rely on cash crops, such as onions, and also lower their efficiency by planting several crops on their small holdings rather than specialize.

The Company will encourage **collective farming**, allowing the region's farmers to pool their land and equipment to allow for scale, increased productivity and greater yields.

Spreading risk across the collective would also allow each farmer to specialize on their strengths, rather than trying to grow a diversity of crops in order to reduce risk on the individual level.

This cooperation will also help the Company manage **communal resources** such as water by lowering the costs of monitoring and enforcement, as it would be dealing with a smaller number of collective groups rather than a large number of individual farmers.

**Targets two clear challenges for farmers: lack of good information and individual difficulties with scale and risk.**



# FPC Services

## Storage

The Company will invest in storage facilities (building off of the Mann Deshi Foundation's existing investments) for farmers to use on fair-cost basis.

Farmers and traders can store produce for personal use or sale to other markets.

## Distribution

The Company will manage the distribution of produce through its direct sales channels, and will sign formal agreements with traders for distribution to markets further afield.

## Leasing and Support

The Company will source equipment by leasing them from third parties. These will either be used by the Company itself, or can be rented to farmers on an hourly or daily basis.

## Innovation and Knowledge Sharing

The following services will be provided in collaboration with the Mann Deshi Foundation, NARI, and Technology Data Analytics to provide the following to farmers:

- A training centre for farmers to teach both agricultural expertise and market analysis
- Crop planting optimisation model
- A knowledge centre for seed, fertilisation, irrigation techniques, etc.
- Water management solutions
- Pilots for community farming

## Processing

The Company will invest in local processing facilities. This will develop different products that will give a diversified product base for increased profits.

## Centralised Procurement

The Company will buy inputs in bulk, and pass the savings onto its member farmers.

The Company will also buy produce at a minimum price from farmers, using demand forecasting and processing to help support this guaranteed price.



# Ecological Restoration

It is vital that the Company integrate efforts to **restore the surrounding ecology** of Satara District as part of their business model. This is necessary to ensure the long-term viability of eco-systems services, the community and the Company.

Thus, the Company will engage in the following initiatives:

1. A multi-year **tree-planting scheme** where farmers must, as a core obligation of their membership, plant ten trees in a month either on their land or in locations designated by the Company. Farmers are responsible for watering and upkeep. Funds can be sourced from CSR budgets from external companies.

After a measure of success is achieved, the Company will reach out to financial institutions, using the tree-planting scheme as proof of the community's ability to work together, and thus act as a signal of its trustworthiness and thus as a basis for favourable lending terms for both the community and Company.

2. A communal **water-management scheme** must be developed, with aggressive targets for water table restoration. Member farmers must adopt strict guidelines on water usage if they are to benefit from the Company's services.



**The long-term ecological viability of the community is critical to the success of the Company.**



**GOVERNANCE AND ORGANISATION**



# Structure: Mann Deshi Kisan Producer Company

The Mann Deshi Kisan Producer Company is a Producer Organisation (PO) registered as a Producer Company (PC), registered under Section 581(C) of the Indian Companies Act, 1956, as amended in 2013.

Ownership of the Company will lie with its members. Members must be producers, whether farmers or smaller POs. However, members do not need to be exclusively producers (i.e. trader-farmers will qualify for membership, but sole traders will not).

We advise that **offering shareholder status to strategy partners** be investigated, based on local landholding and production. This would align interest across the value chain.



	Description
<b>Area of Operation</b>	Entire Union of India
<b>Membership</b>	Any individual, group, association, producer of goods or services
<b>Share</b>	Not tradable but transferable; limited to members at par value
<b>Profit sharing</b>	As per share capital.
<b>Voting rights</b>	One member, one vote.
<b>Extent of Autonomy</b>	Fully autonomous, self-ruled within the provisions of Indian Companies Act
<b>Reserves</b>	Mandatory to create every year
<b>Borrowing power</b>	Borrowing limit fixed by Special Resolution in general meeting. Companies have freedom to raise borrowing power.
<b>Relationship with other corporate /business houses / NGOs</b>	Producers and corporate entity can together float a producer company.

*The characteristics of a Producer Company*

**The FPC will be owned by its shareholders; in other words, its producer members.**

# Membership

Members of the FPC will gain access to the Company's services. In return, the member is expected to sell his or her entire produce through the FPC. The FPC will pledge to buy produce at no lower than the prevailing market price.

Farmers will also make a contribution to the initial **equity** of the Company. A shareholder of the FPC will receive a **dividend** on their shares based on the Company's P&L.

## Optional

The Company can also explore a **credit system** that rewards members based on certain actions, including:

- Produce sold via the Company
- Cooperation with collective farming pilots
- Compliance with environmental practices

These credits could be redeemed for training, planning solutions, warehousing space or additional pay-outs.



**The Company will guarantee benefits to member farmers in exchange for exclusive rights to distribute their produce.**

# Promoter Entity

Producer organisations can be supported by a **Promoter Entity**, which can be an NGO, bank branch, government department, Cooperative Society, or any Association or Federation. The primary role of the PE is support the PO to acquire technical and managerial capacity to run the business on its own.

We recommend that the Mann Deshi Foundation (or some other NGO) act as the Company's Promoter Entity during the initial development of the company (i.e. The first three years).

The Company should also pursue an **equity grant** equivalent to the contribution of its shareholder members, in order to enhance its overall capital base. The Company can start with a grant of INR 500,000, increasing to INR 1,000,000 as the Company grows its member base.

However, this will merely be a small amount of the working capital needed. Thus, it is essential for policy makers to allow outside shareholding into the Company in order to obtain further equity capital.



Support is required in the initial stages as the Company acquires necessary managerial and technical expertise.

# Funding: External Sources

## NABARD Loan

The National Bank for Agricultural and Rural Development (NABARD) provides financial support for POs through a project-funding model.

NABARD is able to fund 90% of a project's cost after due diligence, requiring at least three years of audited balance sheets.

NABARD loans are not meant to support daily business.

**Policy recommendation:** *NABARD should consider lending for working capital, rather than purely on a project basis.*

## SFAC Credit Guarantee

The Small Farmers' Agri-Business Consortium (SFAC) offers a Credit Guarantee Fund for certain lending institutions. This allows them to provide collateral-free credit to FPCs up to INR 10,000,000.

**Policy Recommendation:** *SFAC should consider increasing their maximum guarantee offered to lending institutions.*

## Other banks/lenders

Lending institutions known to have provided working capital to FPCs include:

- Friends of Women's World Banking
- Maanviya Holding (Oikocredit)
- Ananya Finance

Some commercial banks who offer similar financial assistance are:

- ICICI Bank
- Union Bank of India
- Canara Bank
- Vijaya Bank
- Ratnakar Bank

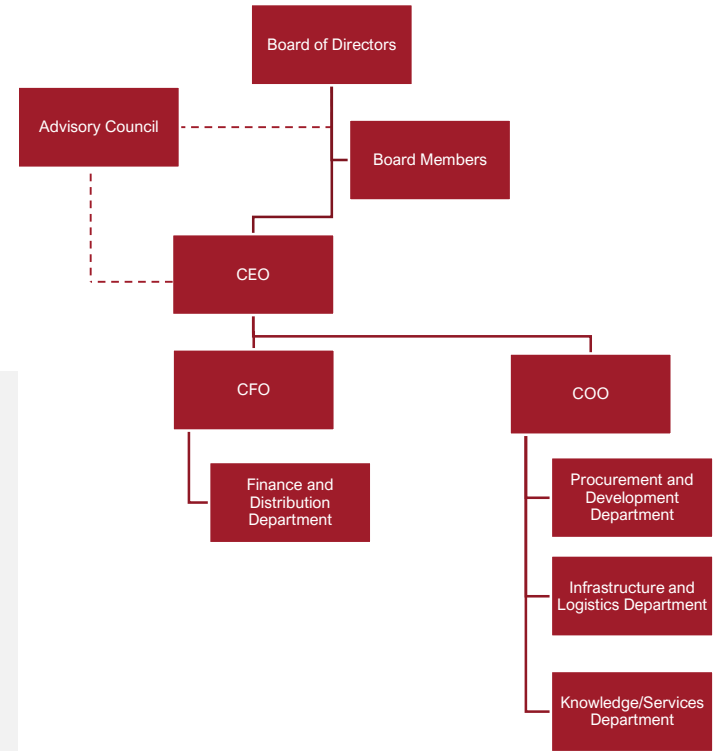
**After the initial set-up phase, the Company needs to be able to sustain its own operations through normal debt financing.**



# Organisational Structure

- An eleven-member **Board of Directors** will decide the framework for the company, elect board members, and monitor the flow of company operations.
- A board of no more than fifteen members will supervise and monitor the company's performance. **Board members** will have no executive authority.
- An **Advisory Council** of no more than five members assist both the management team and **Board of Directors**. Advisors should have relevant connections, agricultural expertise, experience raising capital or banking backgrounds.

- The **Chief Executive Officer** will manage the company's interests, plans, projects and implementation. The CEO is included in, and has the authority to call, board meetings.
- The **Chief Financial Officer** is responsible for the Company's financials and will work closely with departments concerning production and procurement, ensuring that all cash inflows and outflows are accounted for. The CFO must ensure that company targets are being met. The CFO is also responsible for product distribution.
- The **Chief Operating Officer** oversees the operational departments, which include Services and Knowledge, Procurement and Development, and Infrastructure and Logistics. *During the initial stages of the Company, these duties can be handled by the CEO.*



A simple and low-cost organisational structure will be important in the initial stages to keep costs down.

# Departmental Functions

Department Name	Function	Number of Staff
Procurement and Development	<ul style="list-style-type: none"> <li>• Purchases inputs (seeds, fertilizer, etc.)</li> <li>• Collects produce from farmers</li> <li>• Decides which products can be packaged and processed in consultation with Distribution</li> </ul>	2
Finance and Distribution	<ul style="list-style-type: none"> <li>• Maintains financials</li> <li>• Monitors key metrics</li> <li>• Allocates budgets to different departments on a priority basis</li> <li>• Manages cash flow</li> <li>• Manages distribution of products</li> </ul>	3
Knowledge and Services	<ul style="list-style-type: none"> <li>• Works closely with Mann Deshi Foundation to provide training courses to farmers</li> <li>• Acts as a knowledge hub between farmers, markets and external parties</li> <li>• Develops planning models</li> </ul>	1
Infrastructure and Logistics	<ul style="list-style-type: none"> <li>• Works with farmers and traders.</li> <li>• Maintains and manages facility usage</li> </ul>	1

The Company's operations will be supported by a small cohort of professional managers, yet ownership will stay with farmers.

# Key Stakeholders

Stakeholder	Roles
<b>Farmers</b>	Farmers can hold shares in the Company and, through their membership, receive its services. They will sell their produce to the Company and receive dividends based on its profits.
<b>Traders</b>	Traders can act as the Company's agents to buy produce and farmers, and sell produce to retailers and wholesalers.
<b>Government</b>	The government can act as the initial funder of the Company through the Equity Grant Scheme, depending on the amount of shareholder equity (maximum INR 1,000,000). It will also play a crucial role setting agricultural policies and regulations.
<b>Mann Deshi</b>	The Mann Deshi Foundation will help provide training courses, and will allow usage of its current storage facilities at a fair price. The Mann Deshi Bank will work alongside the Company to secure funding.
<b>Research Institute</b>	Research institutes can work to provide advice and expertise to the Company's farmer members.
<b>Strategic Partners</b>	Third-parties can lease their equipment and vehicles to the Company if needed. More partnerships, such as those with technology companies and operators of processing facilities, will come at a later stage.
<b>Consumers</b>	The Company's consumers include retailers, wholesales and end-consumers. Transportation of goods will be handled either by the Company or contracted traders.

The Company's operations will appeal to a wide variety of stakeholders.

# OPERATIONS

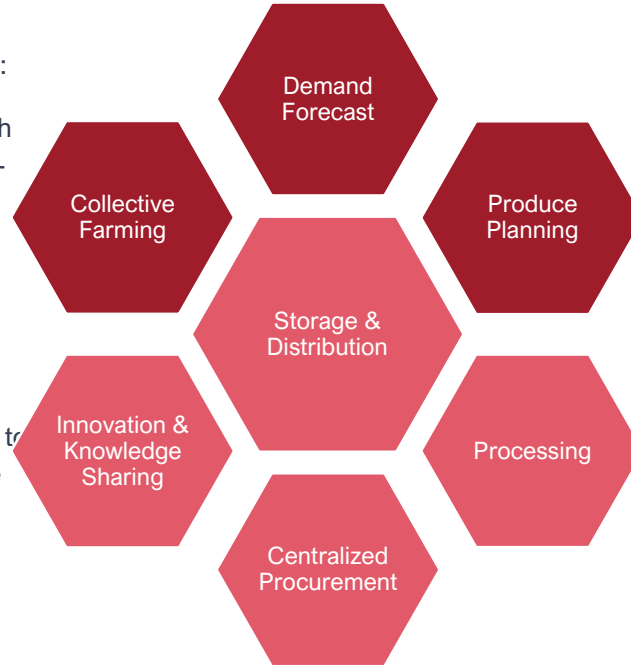




# Overview of FPC Operations and Services

The Company's services will help smallholder farmers to be profitable, sustainable and self-sufficient. The core elements of the Company's services are:

- **Demand Forecasting** to provide both farmers and the Company with up-to-date market information and projections
- **Produce Planning** to safeguard incomes, cut down on wastage, and ensure on-time delivery
- **Collective Farming** to allow farmers to pool resources and assets to achieve scale and efficiency.



In addition to operational support, the FPC will offer the following services:

- **Centralized procurement** of inputs like fertilisers, seeds etc., with savings passed to farmers.
- Access to **storage facilities** (warehouses, cold storage)
- **Processing** of produce including sorting, grading, packaging etc.
- **Distribution** of goods to both the local community, distributors and end-consumers.
- Offer **maintenance and equipment leasing** to upkeep farming equipment and tools
- Developing of a **knowledge-sharing platform** amongst the farming community.

The Company tackles three major issues: poor access to information, poor access to planning tools, and inability to achieve scale.

# Product Focus

The Mann region is known for growing a diverse array of perishable and non-perishable items, and both staples and cash crops.

	Perishable	Non-Perishable
Staple		Sorghum, black millet
Cash-crop	Onions, eggplants, pomegranate, mangoes, guava	Corn

As the Company will serve both the local community and external markets, it needs to ensure that all categories of crop are grown by its member farmers.

Member farmers' use of **Produce Planning** will give the Company a big-picture view of what its members are planting. Combined with **Demand Forecasting**, the Company can decide whether additional incentives are needed to ensure that enough of each category of produce is grown.



Serving both the local community and external markets requires a sustainable split between staples and cash crops.

# Data Collection and Analysis

Better data collection and analysis will help farmers better manage their operations and make more tailored decisions. Here are some of the information the Company can seek to obtain, and how they might benefit farmers:

- Track current market price data (regionally and globally) in order to forecast how prices for agricultural goods may change over time.
- Monitor the region's micro-climates through small weather stations.
- Map the region's geography, including both ground- and surface-water sources.
- Provide reports with demand/supply trends and farming schedules so farmers can make more informed planting decisions.
- Use soil data, crop data and environmental data to help farmers optimise their input usage and lower their costs of production.
- Monitor samples from farms and storage sites to improve the quality of produce.
- Create a traceability system to provide information on source, location, movement, and storage conditions to help increase transparency to stakeholders and consumers.
- Collect comprehensive data for research centers in order to help develop new techniques for farmers working in tougher and harsher environments.

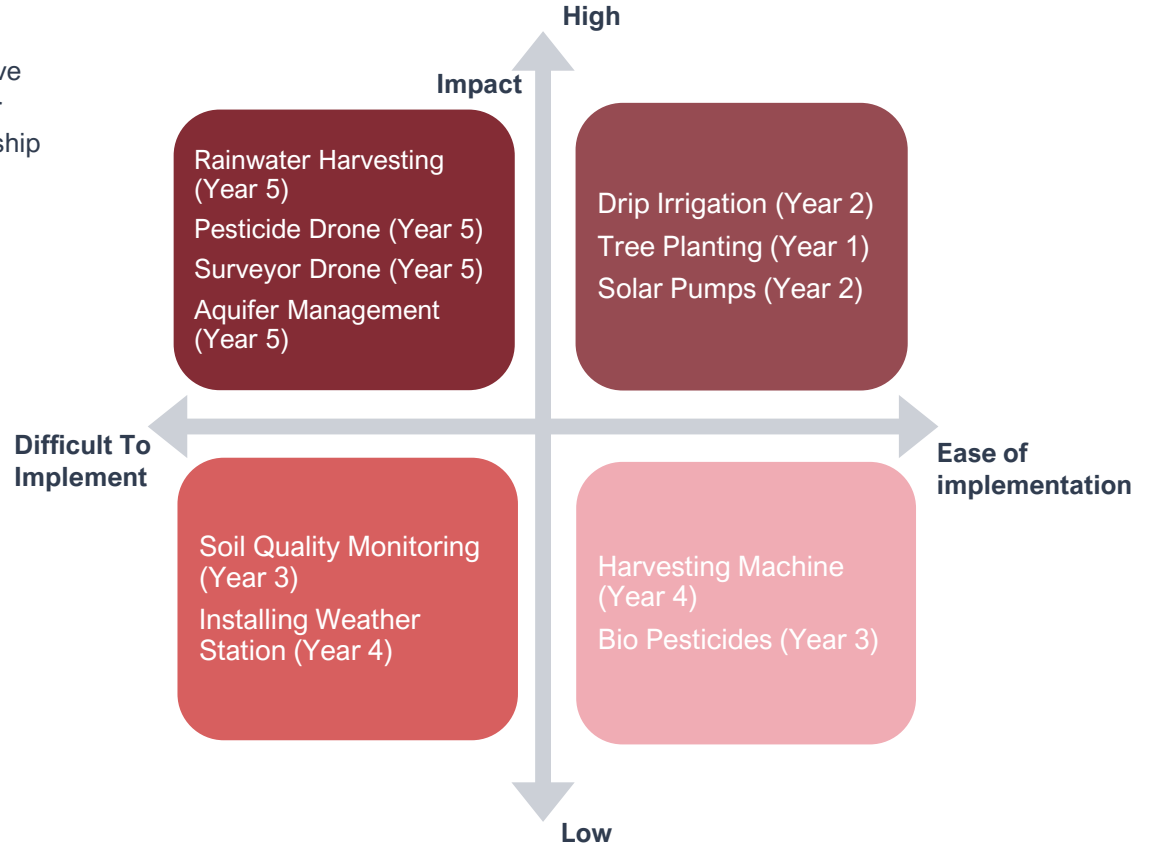


**Data will be used to serve farmers and the Company, not external third parties.**

# Innovation & Technology

The Company will apply technological solutions to drive resource planning, production optimisation, and water management, developed in collaboration and partnership with external firms and sector experts.

<b>Water Management</b>	<b>Productivity Improvements</b>
<ul style="list-style-type: none"> <li>• Rainwater Harvesting</li> <li>• Drip Irrigation</li> <li>• Tree Planting</li> <li>• Aquifer Management</li> </ul>	<ul style="list-style-type: none"> <li>• Drone-applied pesticide/herbicide</li> <li>• Harvesting machines</li> <li>• Solar pumps</li> <li>• Sorting and grading machines</li> </ul>
<b>Proactive Management</b>	<b>Sustainable Farming</b>
<ul style="list-style-type: none"> <li>• Weather stations</li> <li>• Surveyor drones</li> </ul>	<ul style="list-style-type: none"> <li>• Bio-pesticides</li> <li>• Soil quality monitoring</li> <li>• Natural farming and microbials</li> </ul>



The Company will help farmers get access to both tried-and-true techniques and the latest innovations in cultivation and harvesting.



# Demand Forecasting

## Price forecasting

Farmers currently make planting decisions based on past performance or word-of-mouth. This means that farmers' planting decisions are not based on good market signals, which affects income stability and ability to plan for the future.

Thus, the Company will develop a **technology-based** and **data-backed** model of the local agricultural sector. It will rely on historical and current market price data. This model would give a full indication of where market prices are currently, and how they might change in the future.

This data will be delivered to farmers, who can use both current prices and forecasts in order to make more informed planting decisions. The Company will also use this data in its operations: specifically, it will use the demand forecasts to set the minimum guaranteed price it will offer to member farmers. This price guarantee will act as an additional signal to farmers to determine what and how much produce they should plant.

## Mapping

Mapping and surveying technology on a micro-scale is now broadly affordable and accessible even for remote rural areas. These technologies can give an accurate representation of the landscape and climate of a given region.

The Company will partner with drone surveying companies that can map the Mann Taluka region, pinpointing geographical features and surface and ground water sources. This will help with the Company's resource management and ecological restoration initiatives.

The Company will also invest in micro-weather stations that can provide real-time weather data to both the Company and member farmers. This will help farmers understand which crops are suitable for their micro-climate, as well as help farmers prepare for changing weather.

*Note: if successful, this approach can be replicated in other agricultural regions in India and beyond. Advising on the creation of new models can be a later revenue stream for the Company.*

**The goal is to create a model of the local agricultural economy: prices, weather data, and geographical data.**

# Data Delivery

The Company needs to ensure it can deliver its analysis to farmers in a manner that is broadly accessible and understood. The falling price of smartphones and improvements in speech recognition and speech-to-text software provides new mechanisms to get information to people at all education levels.

## Smartphones

Indian smartphones are broadly affordable to even basic rural households.

The Company will partner with a mobile developer to create a mobile application that can deliver important price and weather data to farmers. The app will be designed to be appropriate for farmers, including speech-to-text functionality for farmers with poor literacy skills.

## Feature phones

The Company will also invest in a call centre for farmers that lack access to a smartphone. Member farmers can call to find the latest information about prices and weather. This centre can be partly automated, using speech recognition software, to lower labour costs.

A text message service to collect and distribute information can also be developed.

## Radio

The Company can partner with the Mann Deshi Foundation's community radio station to deliver important market and weather information. The community radio already has a built-in audience, and so is a cost-effective way to spread broad information collected by the Company's technological model.

**Advances in technology allow for easier data delivery to individual farmers.**

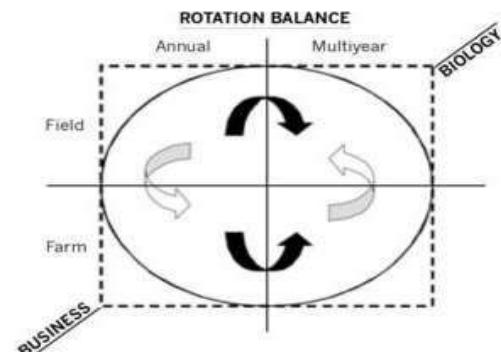
# Produce Planning

However, even when farmers can make well-informed decisions about what, when and how much to plant, they still require access to the tools and frameworks that can help them farm efficiently, effectively and sustainably.

These tools and frameworks will assist farmers in:

- Creating a financial plan and household budget for their household, based on their farming income and household costs.
- Creating a schedule for purchasing and using inputs, such as seeds, fertilisers, and pesticides.
- Developing a calendar with important dates for input application, harvesting, and so on.
- Tracking their overall productivity and yield, allowing them to see the effects of new techniques.

These frameworks will be rooted in indigenous and local knowledge when possible. The planning tools will be motivated by the understanding that **farmers know what they are doing, they just need assistance to implement what they already know.**



Supporting farmers in their decision-making will be a key benefit offered to farmers to encourage membership.

# Collective Purchasing

A core element of the Company's value proposition is giving farmers a platform where they can cooperate and organise. By bargaining as a collective, farmers can receive numerous benefits from the increase in market power.

The Company will use its increased size and promise of bulk orders to purchase inputs at lower prices. These savings can then be passed on to member farmers. The Company can also partner with suppliers to test pilot programmes for the application of inputs.

The platform can also control the distribution of inputs to avoid overuse of fertiliser or pesticides, thus supporting the Company's environmental protection and ecological restoration initiatives.

The Company can also procure or lease its own farming and processing equipment which can be leased to their members.



Initial Phase	Post-Initial Phase
Packing Equipment Crop Thresher	Tractor Onion-planting machine Pulse-production machine

**Promise of lower input/equipment costs will be a main draw for potential farmer members.**



# Knowledge Transfer to Farmers

Some expertise and techniques must be shared with farmers in-person, rather than remotely.

The Company will partner with instructors and practitioners to educate farmers in:

- Crop selection
- Input and resource management
- Produce care and monitoring
- Data usage

The Company will provide training on a local level through:

- Field demonstrations
- Training camps
- Study tours to nearby regions

The Company will engage with external parties, including research institutes, agricultural companies, academic institutions and other farmer producer companies.

The Company can leverage the experience of the **Mann Deshi Foundation** in providing business planning and financial literacy classes to rural women in the local community. Opportunities for partnerships, especially if they align with the Foundation's goal of empowering rural women, are also possible.



Face-to-face training sessions will spread necessary expertise and solidify the Company's benefits amongst farmers.

# Storage and Processing

The Company will store purchased produce. Farmers shall bear the cost of transportation to the facility. Processing activities, such as grading, sorting, cleaning and packaging, will be undertaken at the storage facility.

Three storage facilities have already been built: 1,560 metric Tonnes of dry storage, 25 metric Tonnes of cold storage, and onion silos.

Storage capacity will:

- Provide better prices to farmers as produce distribution can be timed to changes in market price.
- Reduce spoilage and wastage of produce.
- Equip farmers with better yields by reducing their capital costs.

The products grown in the Satara region offer many opportunities for simple processing. This will improve the productivity of the Company by providing a use for lower-grade produce that would otherwise be thrown away. These include:

- Grain and cereal flour
- Cereal spills
- Dried pomegranate and pomegranate seeds
- Pomegranate juice/pulp
- Confectionary: Amla, Imli, Pomegranate, jaggery and jaggery syrup



**Post-harvest services will also be offered to farmers, and provide the best opportunity to add value to harvested produce.**

# Ecological Restoration: Tree Planting (1/2)

## The Scheme

As a condition of their membership, member farmer households must plant ten trees per month (i.e. 120 trees per year), either on their own land or on land designated by the company. Farmers will be responsible for maintenance and upkeep, and must register each sapling through the application and scanning of a bar code or QR code.

The Company will monitor the progress of trees, and ask farmers to replace or replant trees if necessary.

While farmers are responsible for upkeep and maintenance, they will not be responsible for paying for inputs and water. The Mann Deshi Foundation, in partnership with the Company, will seek funding from the CSR budgets of large Indian companies, leveraging the scheme's purpose of ecological restoration.

Trees will be indigenous to the area, and are meant to ensure soil and water retention during dry seasons and drought. Advice and training would be sought from nearby academic institutions and agricultural research institutes.



**Tree-planting can prove the community's ability to work together and solve problems: a signal useful for financial and public institutions.**

# Ecological Restoration: Tree Planting (2/2)

## Rationale

Tree-planting will improve the region's water retention and reduce soil erosion, which will be necessary for the long-term viability of Mhaswad as an agricultural community. It will also provide cover, reducing overall temperatures, as well as protections for smaller plants against inclement weather.

However, in addition to the environmental benefits, the tree-planting scheme can also improve the Company and community's financial standing. The ability for a community to pursue and achieve a single objective is proof of its trustworthiness, ability to organise and commitment.

Thus, the scheme can act as a signal to prominent lenders, providing assurances that that the Company and community can work together to improve economic vitality and repay any loans.

Thus, as the Company is implementing the tree-planting scheme, it should also reach out to prominent Indian and global lenders and encourage them to monitor the scheme's success. This may lead to better lending terms within a few years of implementation.



**Tree-planting can prove the community's ability to work together and solve problems: a signal useful for financial and public institutions.**



# Ecological Restoration: Water Management (1/2)

## The Scheme

As a condition of their membership, member farmer households must submit to a strict water management regime developed by the Company. The scheme will include the following initiatives:

- The Company will use drones map all surface- and ground-water sources.
- Access to public and Company-owned wells will be controlled and rationed to ensure member farmers have access to water.
- Privately-owned wells must be registered with the Company, which will install monitoring equipment to track usage.
- Farmers will be encouraged to implement water-efficient methods of irrigation and cultivation.
- Farmers will log their water usage with the Company, which will track water usage against yield. Farmers with high yields and low water usage will be offered the chance to share their best practices through the Company's knowledge-sharing platform.



**Farmers that want access to the Company's varied services and benefits need to pledge to use water sustainably.**

# Ecological Restoration: Water Management (2/2)

## Rationale

The long-term viability of the Company and the community relies on the restoration of water sources throughout the Satara region. Water tables throughout the region must be restored: in other words, more water must be returned to the soil than is extracted.

Technology can provide a good mechanism to collect water usage data without relying on labour-intensive monitoring and enforcement. This makes it easier for private and civil-society entities, like the Company, to provide structures for resource management.

Stringent community-based water management systems have helped agricultural communities in arid regions throughout the developed and developing worlds, and those lessons should be applied in Satara.

There is a risk that implementing strict water management schemes may discourage some farmers, especially wealthier ones with private water sources, from joining the Company. The Company must ensure that its pre-harvest services and post-harvest added-value are appealing enough to overcome the wish to use water freely.



**Farmers that want access to the Company's varied services and benefits need to pledge to use water sustainably.**



A vibrant outdoor market scene with people, stalls, and produce. The market is covered with yellow and white tarps. In the foreground, a man in a white shirt and light-colored pants stands near a woman in a colorful sari. To the left, a horse is partially visible. The market is filled with various goods, including vegetables, fruits, and packaged items, displayed in baskets and crates. Other people are seen in the background, some wearing white uniforms and caps, suggesting a busy, organized market environment.

# SALES AND MARKETING

# Logo & Brand Tagline



The new Company will be represented by a logo (see left) that leverages Mann Deshi's existing reputation, while also highlighting the importance of food and agriculture to the new initiative.

"The Lady" represents Mann Deshi's identity as a valued partner of the community. Mann Deshi is well-known for its support and social mission, addressing a wide array of community needs. Inclusion of this trusted symbol also ties the Company to the wider Mann Deshi ecosystem, i.e. the Mann Deshi Bank and the Mann Deshi Foundation.

"The wheat and millet" represents food, the source of nourishment and strength for the community, as well as livelihood and social justice for all.

## Slogan Options

### Indigenously Yours

Connected to an empowered local community, working with local materials, and a Company working for the benefit of its members.

### Be a Farmer. Live Better.

Member farmers will have more chances to improve their livelihoods, thus making it a more attractive career choice for members of the community.

The Company would position itself as a way to revitalise the community.

### Nourishing India

The Company would strive to provide the necessary food and produce to improve the nutrition and health of the local community, and of wider Indian society.



# Branding and Marketing

The Mann Deshi Kisan Producer Company will aim to **empower and reward the community's contribution to agriculture through quality services, technology and local wisdom.**

The Company will leverage its relationship with local cooperatives to promote the Company as one that values local collaboration. This positioning will help the Company as it seeks to work with local and state governments.

## Potential Members

Building membership among the local farmer community will be one of the prime focuses of the Company's marketing. The Company will focus on raising awareness of its establishment and the array of services that would benefit new member farmers.

## Potential Customers

To build trust among the local community, the Company will offer inclusive outreach activities to the local and wider public.



**Leveraging Mann Deshi's strong community reputation to drive interest in the Company.**

# Marketing to Potential Members



The first audience the Company will need to target with its marketing are potential farmers and farming households. Growth in this area will build the Company's production capacity and level of shareholder equity.

The Company's marketing outreach to potential members must be built on **visible and provable examples of how farmers were helped by the Company**, including but not limited to sharing success stories of member farmers who increased their productivity and income, and simple outreach campaigns that highlight practical expertise.

We predict that farmers will initially be most attracted by the pre-harvest services, such as lower prices for inputs, access to training programmes, and the demand forecasting and produce planning functions.



## Platforms for Outreach

- Community Radio
- Testimonials from community leaders and prominent farmers
- Directly-owned stores
- Travelling courses from the Company and the Mann Deshi Foundation

Trust will need to be the core of the Company's outreach to potential member farmers.

# Marketing to Potential Customers

## Marketing Transparency

The biggest hurdle for the Company's sales is the fact that its produce is undifferentiated from other produce. This means that distributors and end-consumers have no information about where their produce is coming from.

The Company's public marketing should focus on its efforts to revitalise the local agricultural community, and the tangible benefits the Company provides to its farmers. It can also launch public campaigns highlighting its ecological restoration and sustainability efforts, to reassure Indian distributors and consumers about where their produce is coming from.



## Branding Packaged and Processed Produce

Processed and packaged products not only decrease wastage in the value chain, they will also allow for brand and product differentiation in what would normally be a commoditised marketplace. Investment in these products can be branded with the Company logo and slogan and sold to wholesalers, retailers and end-consumers directly.

The Company should explore the possibility of developing a regional brand for both raw and processed produce. The local region's specific climate has led to uniquely tasting produce that might stand out when sold outside of a commodity marketplace. The Company should capitalise on India's strong protections for geographical indications and support the creation of a **Mann** or **Satara** regional brand.

The effort can be led by a non-profit organisation, such as **the Mann Deshi Foundation** or some other community group, but the Company will carry out the necessary quality control mechanisms and marketing initiatives to ensure the brand's success.

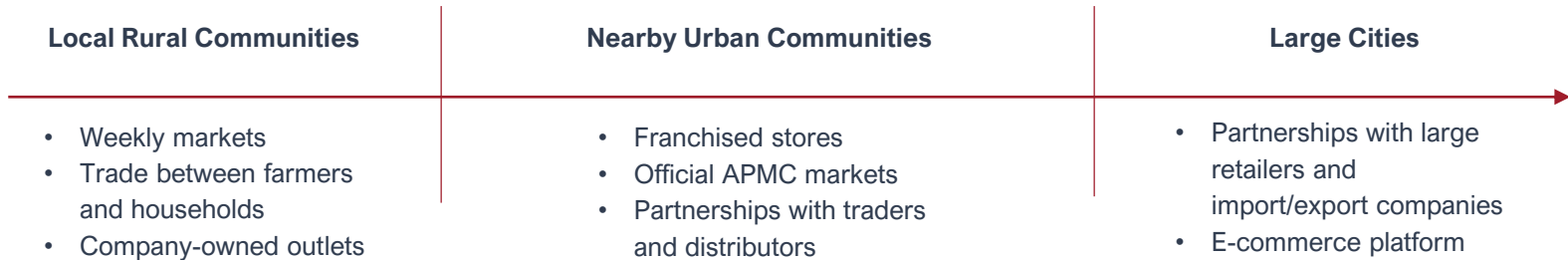
**Product differentiation will disconnecting Satara's fate from the wider agricultural market.**

# Sales Channels: Direct and Franchise Sales

In addition to selling to wholesalers and distributors, the Company will set up direct and franchise sales channels through its own branded stores. Stores in the local community can also act as hubs to distribute inputs and services to member farmers. Franchise stores will help spread the Mann Deshi brand, and can also act as a hub to distribute pre-harvest services to farmers.

Stores can initially be established in the surrounding region: Mhaswad, Pune, Dahiwadi, Chiplin, Vaduj, Sinnar, Satara, Silvassa, Lonand, Kamothe, and Hubli.

Once the business has been established, the Company can explore the development of an e-commerce and digital media strategy to reach different national and global markets.



*Different sales mechanisms depending on distance from local community.*

**The Company will develop different sales mechanisms depending on distance from Satara and size of market.**

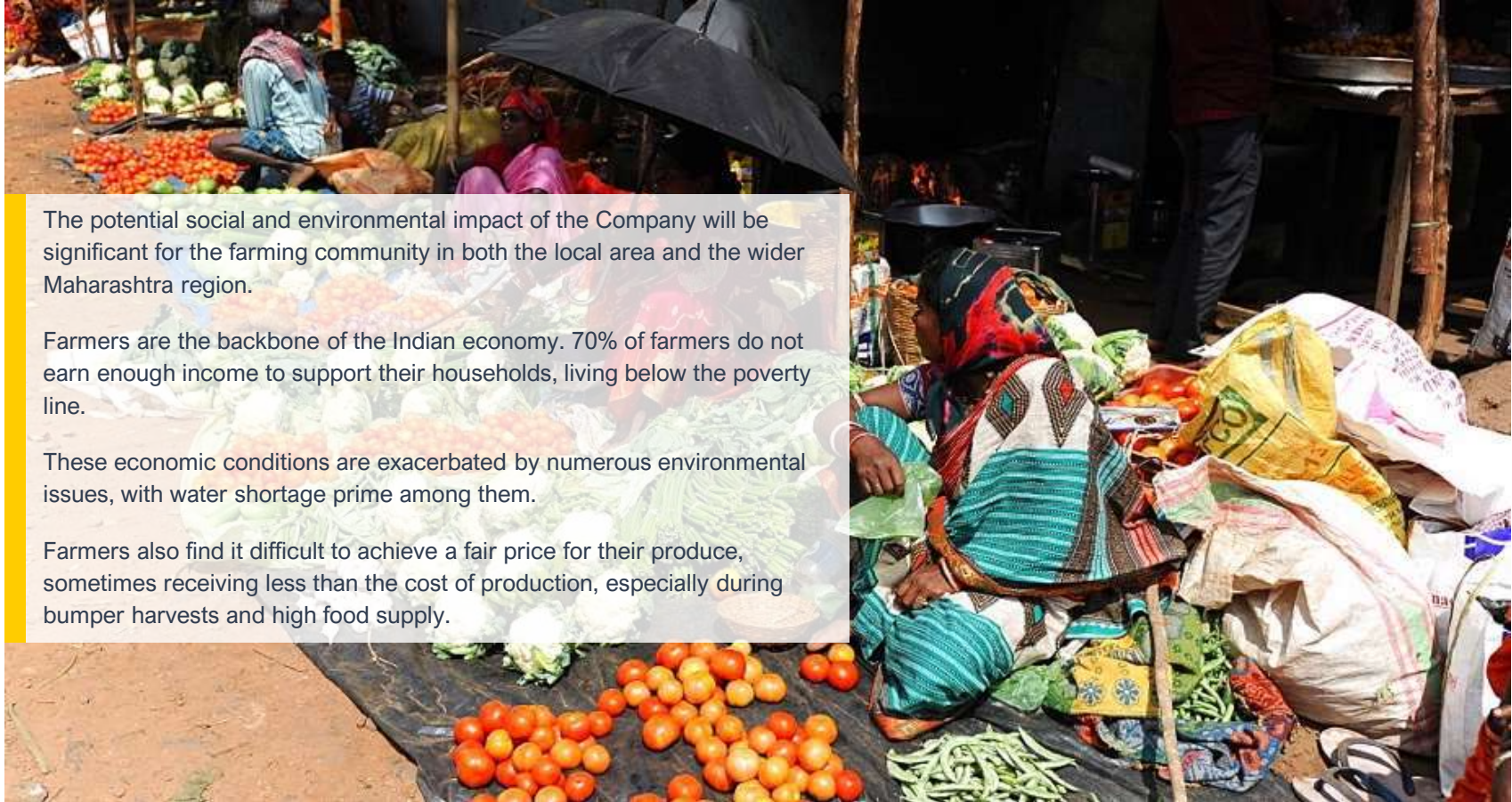




## **SOCIAL IMPACT AND COMMUNITY BENEFITS**



# Summary



The potential social and environmental impact of the Company will be significant for the farming community in both the local area and the wider Maharashtra region.

Farmers are the backbone of the Indian economy. 70% of farmers do not earn enough income to support their households, living below the poverty line.

These economic conditions are exacerbated by numerous environmental issues, with water shortage prime among them.

Farmers also find it difficult to achieve a fair price for their produce, sometimes receiving less than the cost of production, especially during bumper harvests and high food supply.

# Social Impact & Community Empowerment

## Individual Farmers

Farmer incomes will be increased due to lower-cost inputs and access to improved market prices from selling to the Company, and will be more stable due to better market information and dividends from their ownership share.

The farmer ownership share will also deepen member farmers' presence in the community by giving them a tangible financial stake in its success.

Farmers will also have better access to techniques and expertise, allowing them to become better and more sustainable farmers.

Finally, by creating a trusted platform for community farming, the Company will deepen the connections farmers have with each other. This would build trust within the community as farmers routinely work together to pool resources and farm common land.

## Wider Community

Improved economic opportunities for individual farmers will spread to the wider community by supporting economic growth and development. This may lead to population retention, or even growth, as young people stay or return to the Mhaswad area.

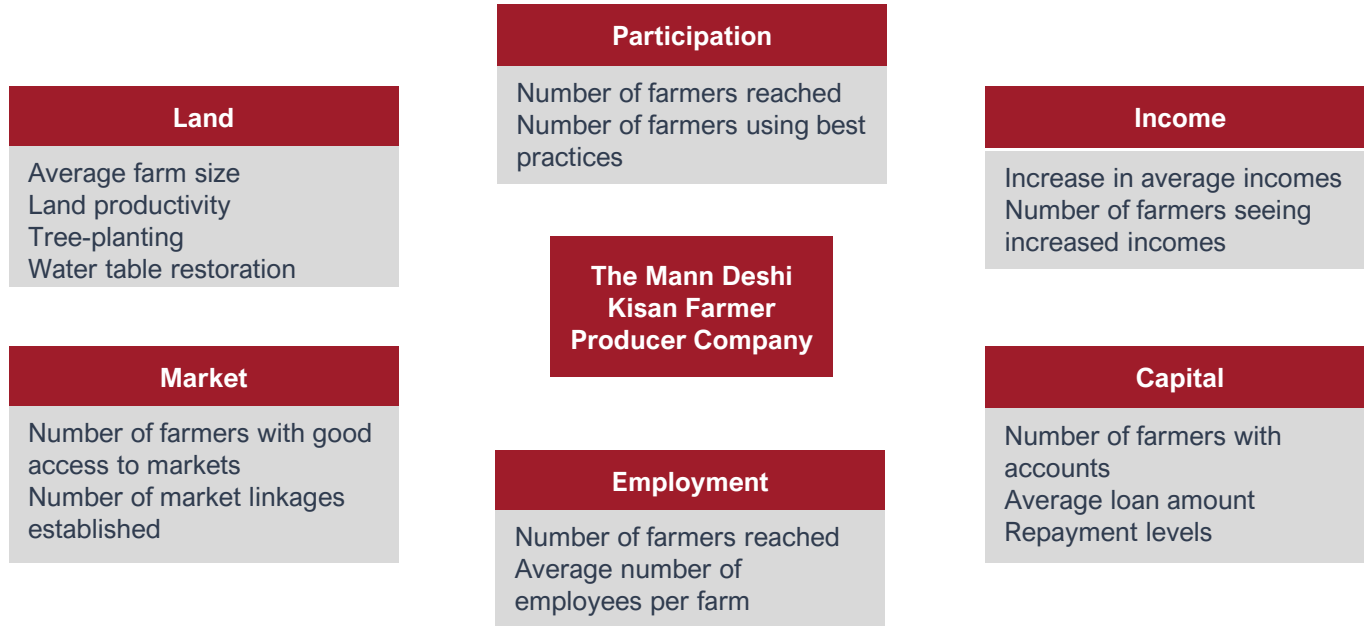
The ecological restoration initiatives will also put the community on a path towards long-term viability while potentially — in the case of the tree-planting scheme — leading to short-term tangible benefits as well (i.e. better terms for financing).

The Company's success will also draw greater attention to the Satara region, building on the efforts of the Mann Deshi Bank and the Mann Deshi Foundation.

Improved economic outcomes for the community may help arrest, if not reverse, rural-urban migration.

# Measuring Social Impact

Social impact will be measured based on a wide and diverse array of KPIs. These will be measured through a combination of data collection through the Company **Produce Planning** functions and cooperation with an independent third-party.



A focus on measurable, quantitative key performance indicators, captured in part by the Company's technology platform.





## **FINANCIAL ANALYSIS**

# Financial Summary

## Revenue Sources

- Sale of raw produce to traders, end-consumers
- Sale of inputs (bags, saplings, seeds, fertilizer, etc.)
- Sale of value-added / processed produce

## Funding

- Equity contribution from farmers members
- Government grant
- Bridged with a credit line

	Y1	Y2	Y3	Y4	Y5
<b># of Farmers (End-of-Period)</b>	940	1,900	2,860	3,820	4,780
<b>Cultivated Land (Hectares)</b>	1,269	2,565	3,861	5,157	6,453
<b>Sales/Revenue (Rs Crore)</b>	51	108	187	273	368
<b>Cost (Rs Crore)</b>	47	99	172	251	339
<b>Profit Before Tax (Rs Crore)</b>	4	9	15	22	30

Aiming to reach 5000 farmers, with pre-tax profits of INR 3,000,000,000 by Year 5.

# Key Assumptions & Drivers (1/3)

## Membership and Production

### Farmer Enrolment

- The Company can leverage its existing Farm to Market program to drive initial membership, attracting 500 members on Day 1.
- The Company can attract 40 new members each month in Year 1, and 80 new members per month afterward.
- The Company will have 940 members by end of Year 1, and around 5,000 members by Year 5.

### Production

- Average landholding per farmer is 1.35 hectares.
- Allocation of land by crop type: 20% perishable crops, 50% non-perishable crops, 30% onions
- Annual yield per hectare by crop type (in metric tons per year): 11 for perishable, 15 for non-perishable, 25 for onion

## Revenue

### Raw Produce

- A profit margin of 14% on perishable products, and 33% on non-perishable produce and onions.
- 10% of volume is wasted.

### Change in Inputs

- Inputs purchased by the Company are sold to member farmers at 10% mark-up.

### Value-added Products

- The weighted profit margin for processed and value added goods will be an average of 48%.

# Key Assumptions & Drivers (2/3)

## Direct Costs

### Cost of Raw Produce

- Price per kilogram of raw produce is: INR 35 (USD 0.50) for perishables, INR 30 (USD 0.40) for non-perishable, and INR 9 (USD 0.10) for onions.
- Purchase price will be a slight premium to prevailing weekly market prices.

### Cost of Transportation

- Transportation cost will be INR 1,222 (USD 17) per metric ton between storage and markets

### Cost of Storage

- The Company will initially leverage Mann Deshi Foundation's existing storage.
- Storage costs will be: INR 300 (USD 4.30) per metric ton for perishable and INR 150 (USD 2.10) per metric ton for non-perishables.
- Storage costs for onions are assumed to be 0, due to the ease of storage.
- 50% of crops would be stored in Company storage. Average storage time will be 2 months for non-perishables and 5 days for perishables.

### Cost of Inputs

- The cost of inputs is assumed to be around 20% of the produce sale price.
- An additional 1% of the sale price will go towards transportation costs for inputs



# Key Assumptions & Drivers (3/3)

## Indirect Costs

### Staffing Costs

- The number of employees will grow from 9 in Year 1 to 36 in Year 5 in order to serve the expanding member base.
- Monthly compensation for senior employees will be INR 30,000 (USD 430) and junior employees will be INR 15,000 (USD 220). This rate will increase at a rate of 5% per year.

### Sales and Marketing

- The sales and marketing strategy will equal 0.5% of the Company's revenue base (i.e. Year 1's sales/marketing budget will equal INR 2,500,000, or USD 36,000)

### Other Costs

- Rental cost for headquarters will be INR 10,000 (USD 140) per month, leveraging on Mann Deshi Foundation's existing office space.
- Processing equipment will have a total CAPEX of INR 5,000,000 (USD 72,000) over five years, with straight line amortization. OPEX will be INR 500,000 (USD 7,200) per year, increasing with inflation.
- Pilot programmes for technology, data analysis and other innovation initiatives will cost INR 500,000 (USD 7,200) per year, increasing with inflation.
- Audits will cost INR 200,000 (USD 2,900) per year, increasing with inflation.
- Interest would be 8%, and the loan is expected to be repaid within one year.

# Capital Requirement

## Capital Requirements

- Initial capital need estimated to be INR 130,000,000 (USD 18,800,000)
- Mainly driven by the following key factors:
  - Time lapse (payment term, time of reaching market) between purchase and sale of raw produce. Estimated to be approx. 2 weeks
  - Initial CAPEX (e.g. processing equipment)
  - Other overhead (staff costs, transportation/storage, etc.)

## Potential Sources of Capital

- Farmers' equity contribution (refer to organisational and governance section) of INR 1,000,000 (USD 14,400)
- Government grant of INR 1,000,000 (USD 14,400)
- Balancing capital need of INR 11,000,000 (USD 159,000) expected to be funded via a short-term loan from financial institution
  - Repayment period of 1 year
  - Loan interest rate of 8% per annum

## Initial Need

~ INR  
13,000,000



## Potential Sources of Capital

### Balancing Capital Need

~ INR 11,000,000

### Farmers' Equity Contribution

~ INR  
1,000,000



### Government Grant

~ INR  
1,000,000



Total need estimated to be INR 130,000,000, primarily funded through farmer contributions, government grants, and other sources of capital

# Summary Profit & Loss Projection

	Y1	Y2	Y3	Y4	Y5
<b>Key Drivers</b>					
No. of FPC Farmers (End-of-Period)	940	1,900	2,860	3,820	4,780
Aggregate Area of Land Held by FPC Farmers (Hectares)	1,269	2,565	3,861	5,157	6,453
<b>Key Financials (Rs Crore)</b>					
<b>Revenue</b>					
Proceeds of Sale of Raw Produce	42	89	155	227	306
Charge of Farmer Inputs	8	18	31	45	61
Proceeds of Sale of Value-added Products	1	1	1	1	1
<b>Total Revenue</b>	<b>51</b>	<b>108</b>	<b>187</b>	<b>273</b>	<b>368</b>
<b>Direct Expenses</b>					
Cost of Purchasing Produce	36	77	133	195	263
Cost of Services Provided	10	21	36	53	71
Cost of Producing Value-added Products	0	1	1	1	1
<b>Gross Margin</b>	<b>5</b>	<b>10</b>	<b>17</b>	<b>25</b>	<b>33</b>
<b>Gross Margin %</b>	<b>9%</b>	<b>9%</b>	<b>9%</b>	<b>9%</b>	<b>9%</b>
<b>Indirect Expenses</b>					
	1	1	2	3	4
<b>Net Profit Before Tax</b>	<b>4</b>	<b>9</b>	<b>15</b>	<b>22</b>	<b>30</b>

# POLICY RECOMMENDATIONS





# Policy Recommendations

In order to ensure the greater success of the model, central policy changes can be enacted to both support the Company and other FPCs across India.

## **Allow private investment into Farmer Producer Companies**

Currently, FPCs are constrained in their ability to sell ownership shares to private entities. This imperative is understandable, as FPCs are designed to be owned by farmers, who would capture the majority of profits. However, this makes it difficult for FPCs to acquire the funds for initial CAPEX and other investments. Allowing limited private equity investment will ease the initial implementation and allow FPCs to be more ambitious with their services.

## **Increased government grants and lending to Farmer Producer Companies**

Alternately, the government should consider expanding the grants and lending available to FPCs. Currently, loans are constrained either by the level of farmer equity financing, or are distributed on a project-basis. Expanding government financing would give FPCs the initial funds needed for implementation, without leading to the ownership questions present with private financing.

## **Improved access to organised credit for marginal farmers**

Few banks are willing or equipped to offer financing based off a farmer's or an FPC's expected cash flows, or determine their credit-worthiness. Financial firms should receive government support to offer these, aiding the implementation and operation of new agricultural organisations.

## **Provide incentives for FPCs to engage in environmental protection and ecological restoration**

Ecological restoration, especially in harsh environments, is vital if farming communities are to survive. The government should provide incentives for communities to engage in these initiatives. They can take many forms: credits for restoring water tables, lower loan terms for tree planting schemes, access to carbon credit markets, and so on.

# Policy Recommendations

## **Institute seed banks in villages**

The government should encourage and fund the creation of seed banks in villages throughout India. This would help to preserve genetic diversity amongst the produce grown by villagers. This would avoid monocultures over time (created through constant bulk purchases) as well as preserve local and indigenous crops.

## **Develop and support a system of crop insurance**

Crop insurance schemes are a proven mechanism to reduce risk for farmers. With crop insurance, farmers are more willing to specialise in what they are best at growing, increasing both yields and overall incomes. However, crop insurance can be difficult for private insurers to run, as failures are not statistically independent. Thus, a government-run or government-supported system of crop insurance would help reduce risk while allowing the cost of payouts to be spread across a much larger population.

## **Institute local soil fertility labs**

Over-use of fertiliser and monocultures can have deleterious effects on soil quality. This can be especially damaging in arid and dry areas, which are under threat from soil erosion. Local soil fertiliser labs can both research techniques on how to sustain and improve soil quality, while also acting as a repository of fertile soil when needed.

## **Develop stricter water management regimes**

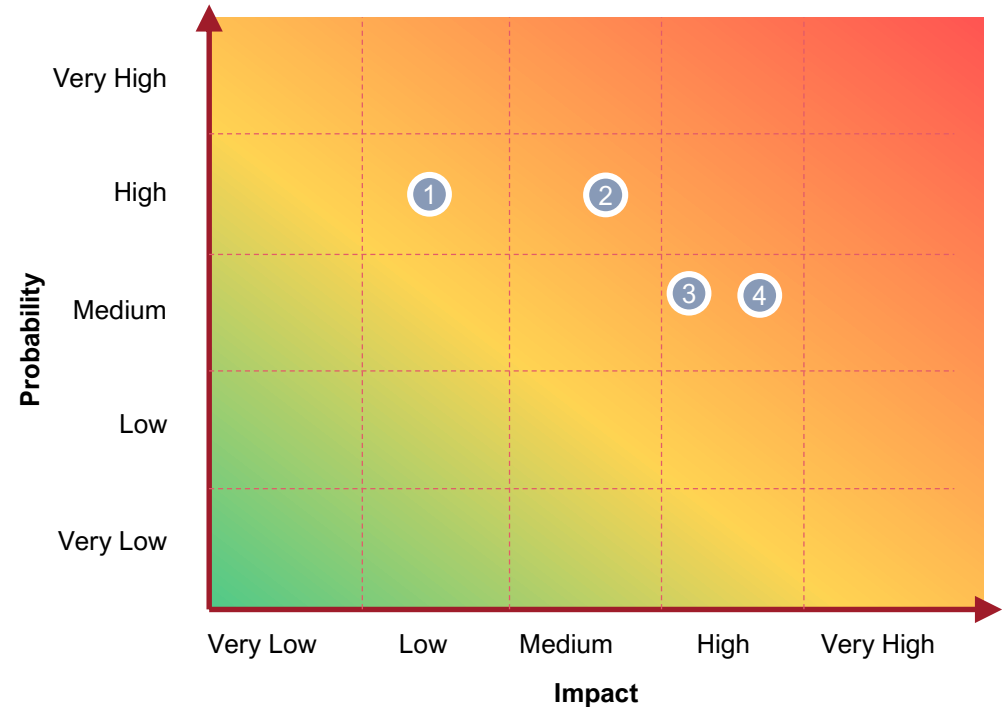
Water over-exploitation is a serious problem in India, where decades of overuse have almost completely depleted groundwater sources. In exchange for guarantees that FPCs institute strict water management regimes, the government can then control overuse of water by larger individual farmers. This will help ensure a more sustainable use of water across all farms in the community.

A close-up photograph of a young green plant with fuzzy, heart-shaped leaves growing from a dark, charred branch. The background is blurred, showing more of the charred wood and soil. A semi-transparent white banner is overlaid across the top of the image, containing the text "RISK ANALYSIS AND MITIGATION".

## **RISK ANALYSIS AND MITIGATION**

# Risk Mitigation: Production & Procurement

- 1 Risk: Farmers provide produce of inconsistent quality.**  
Mitigation: The Company will provide sustainable and consistent farm consulting, in addition to sorting and grading services. The Company will also provide seeds, pesticide, and guidance to farmers to ensure consistent quality of produce.
- 2 Risk: Adverse Climate (No Rainfall).**  
Mitigation: The Company will institute strict water management regimes in order to ensure a sustainable water supply in low-rainfall seasons.
- 3 Risk: Price changes between harvesting and final sales could lead to unexpected losses.**  
Mitigation: The Company shall use its data analysis platform to make pricing decisions and determine the optimal selling strategy and timing.
- 4 Risk: Mismatch between market demand and supply**  
Mitigation: The Company must have a strong market network and planning framework.

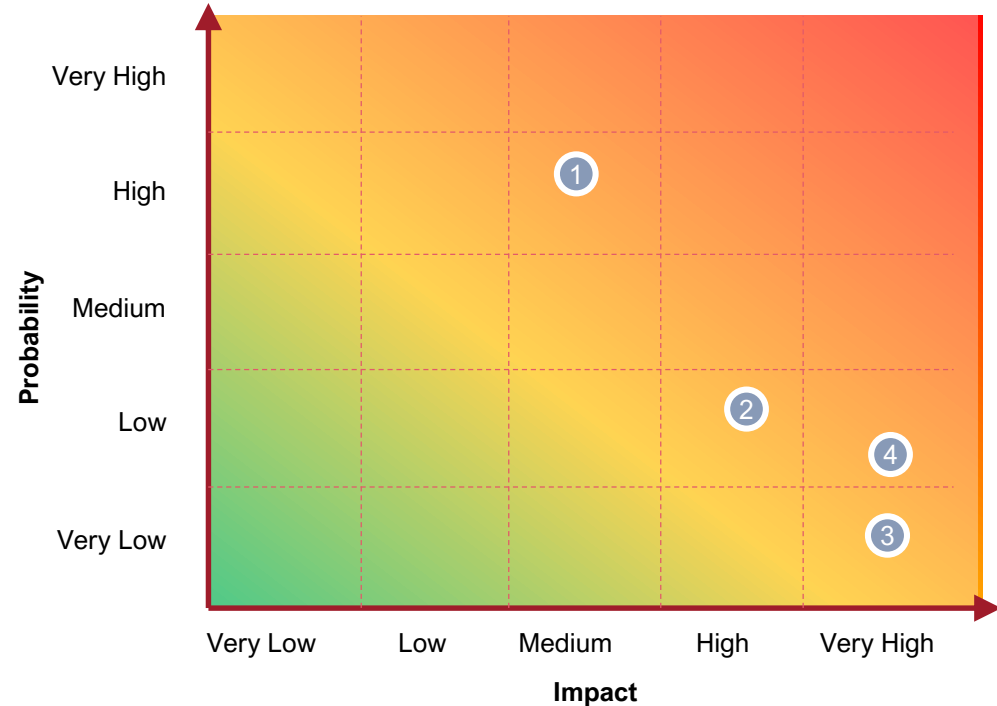


The Company will ensure compliance with standards and output quality, and will provide support during adverse environmental conditions.



# Risk Mitigation: Constraints & Collaboration

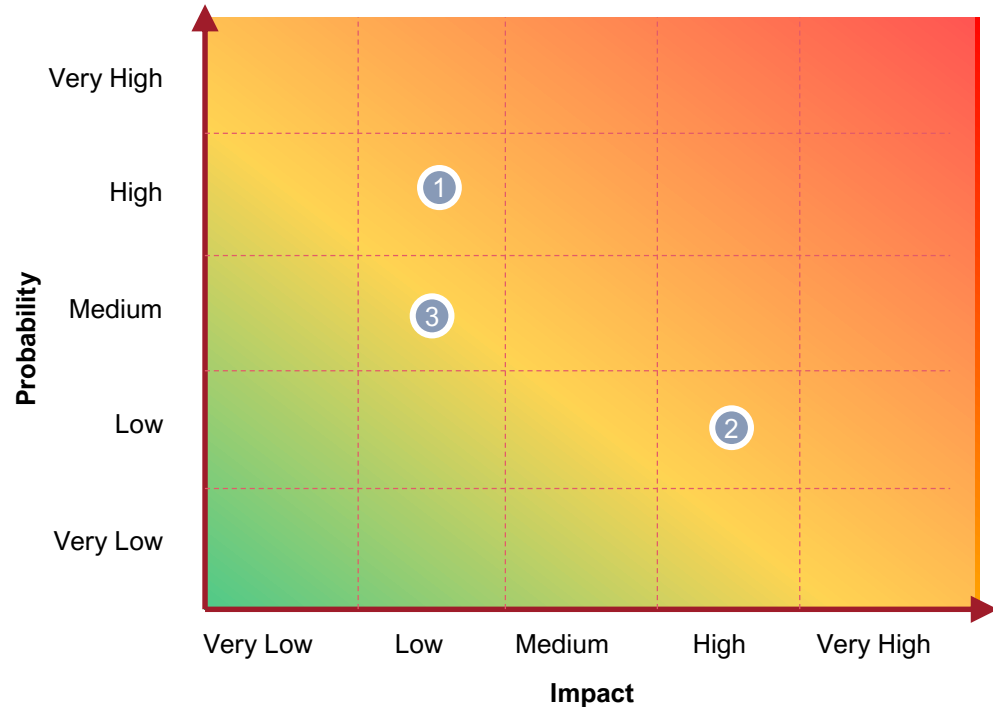
- 1 Risk: Lack of skilled labor.**  
Mitigation: Strong brand presence and network, and competitive salaries.
- 2 Risk: Lack of farmer interest in joining the Company**  
Mitigation: Comprehensive marketing strategy to demonstrate income stability for farmers.
- 3 Risk: Lack of collaboration between stakeholders.**  
Mitigation: Transparent communication between stakeholders to ensure FPC's goals are being met.
- 4 Risk: Financial and/or social targets not being met.**  
Mitigation: Continuous monitoring of progresses through metrics, implementing the corrective action when necessary.



The Company will leverage a strong network and demonstrable benefits to drive membership amongst farmers.

# Risk Mitigation: Miscellaneous

- 1 Risk : Low technology adoption by farmers.**  
Mitigation: The Company will collaborate with the Mann Deshi Foundation to establish learning groups among farmers and provide comprehensive training.
- 2 Risk: Ineffective governance and/or licencing/compliance.**  
Mitigation: Strong leadership team, BOD and Advisory Council, as well as ensuring the Company has the operating license from FSSAI for processing activity.
- 3 Risk: Difficulty maintaining relationship with traders**  
Mitigation: Involve traders in assisting and improving FPC's market access, to also benefit trader where possible



The Company will ensure compliance with standards and output quality, and will provide support during adverse environmental conditions.



# IMPLEMENTATION

# Implementation Plan (1/2)

Focus Area	Phases	Year 1				Y2	Y3	Y4	Y5
		Q1	Q2	Q3	Q4				
<b>Business Model, Governance &amp; HR</b>	Engage and communicate the business model to the key stakeholders								
	Establish shareholders & members, board of directors, management system and operating procedures of FPC								
	Recruit management team and supporting staff								
<b>Financial</b>	Obtain the investment from farmers								
	Secure the initial funding matching from Government								
	Sourcing other investors								
<b>Operations</b>	Rental of Mann Deshi warehouse / cold storage								
	Purchase and installation of Floor mill and package machinery								
<b>Commercial</b>	Initiate to buy produce from the farmers and sales								
	Initiate to sell fertilizer, seeds and pesticides to farmers								
	Offer maintenance and equipment leasing services								
<b>Knowledge sharing</b>	Initiate Demand and Produce Planning to farmers								
	Launch “Pilot of Collective Farming Scheme”								



# Implementation Plan (2/2)

Focus Area	Phases	Year 1				Y2	Y3	Y4	Y5
		Q1	Q2	Q3	Q4				
Marketing & Communication	Launch of Mann Deshi FPC Branding Activities								
	Community engagement activities to engage more farmers in the community								
	Launch Social Media Campaign and events								



# CONCLUSION AND RECOMMENDATIONS



# Conclusion

Farmers in the Mann Taluka region face several challenges: harsh environmental conditions, poor access to agricultural expertise, and small landholdings. In addition, they lack market leverage, taking whatever price the market is willing to pay for their produce.

The **Mann Deshi Kisan Producer Company** will organise local farming households in order to tackle these challenges and support rural livelihoods. Organisation and cooperation will allow farmers to:

- Receive improved prices for their produce through better access, greater market leverage, and local processing
- Improve their production and efficiency through provided services
- Purchase higher-quality inputs at lower prices due to bulk purchasing.

**Three key services** will be offered to target specific challenges that farmers face:

1. A technology-backed and data-based model will provide **demand forecasting** to both farmers and the Company, allowing them to make proper planting and pricing decisions.
2. An array of **produce planning tools** to help farmers plan, cultivate and harvest more efficiently and sustainably.
3. A framework for **collective farming**, allowing farmers to pool their resources and capital to achieve scale and purchase more expensive equipment.

The Company will purchase produce from farmers at no less than a **guaranteed minimum price** (formulated through the demand forecasting model). The Company will invest in local storage and processing to add value to raw produce, which will be sold in both the local community and to external markets.

The Company will also organise two ecological restoration mechanisms to ensure the long-term viability of the agricultural sector: a **tree-planting scheme** and a **water-management scheme**. Member farmers will be obliged to support these schemes as a condition of membership.

This proposal expects the number of member farmers to grow from 500 at establishment to around 5,000 by Year 5. The Company will require INR 13,000,000 in capital funding, which can be drawn from farmer equity contributions, government grants, and loans from financial institutions. Pre-tax revenue and profit is estimated to reach INR 32,000,000,000 and INR 3,000,000,000 respectively by Year 5.





# Long-Term Recommendations

There are several options that the Company can explore in the long-term to continue its purpose of supporting local farmers and the wider agricultural community:

1. The Company can consider how to connect the tree-planting scheme with tangible short-term benefits. These might include connections to carbon credit trading markets, or discussions with larger financial institutions in using tree-planting as a signal of creditworthiness.
2. The Company can explore the creation of an e-commerce platform and a wider digital presence in order to directly reach end-consumers in larger and more distant markets.
3. By extension, the Company can consider the creation of a regional brand tied to Mhaswad and Satara. This would help differentiate the Company's products in the marketplace even further, and appeal to new markets.
4. Upon creation of its model of the local agricultural economy, the Company can consider helping other agricultural regions in India and beyond develop their own demand forecasting models. Licensing can then act as an alternate revenue stream for the Company.





# THANK YOU FOR READING



**FOR MORE INFORMATION ABOUT THE 2019 INDIA GLOBAL LEADERS PROGRAMME, OR THE MANN DESHI KISAN PRODUCER COMPANY,  
PLEASE CONTACT [ENQUIRY@GLOBAL-INST.COM](mailto:ENQUIRY@GLOBAL-INST.COM)**