

Five Crops, Two Cold Rooms

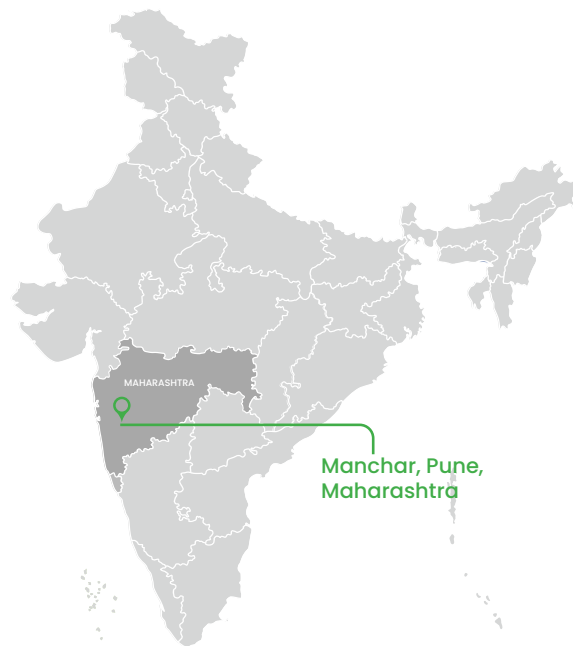
An Agribusiness Enterprise's Journey from Distress Sales to Year-Round Value Addition



From Selling on Deadline to Selling on Price

Every harvest at Gunjal Green Field Agro came with a deadline. The enterprise aggregates ginger, mango, banana, cabbage, and papaya from local farmers around its 25-acre cultivation base in Manchar, Pune, and supplies wholesale markets in Pune. With no storage or processing of its own, produce had to be sold within 1–2 days of harvest, at whatever price the market offered that day. Post-harvest losses on mango, banana, and cabbage ran at 6% to 8%, and trading margins stayed below 10%.

The constraint was time, not supply. A two-day selling window stripped away bargaining power and left the business exposed to every market crash. Storage alone would only buy a few days; the bigger gain lay in ripening and processing produce into higher-value products. Financing was the harder obstacle. Financial institutions had little awareness of micro cold storage technology, which kept affordable finance out of reach.



The initial losses became my biggest learning. Today, I have mastered the technology and know how to use it effectively

Shambhau Gunjal, Owner, Gunjal Green Field Agro (OPC) Private Limited, on turning early losses into operating know-how

SUGAM-CSS treated the problem as a business case, not an equipment purchase. The project team assessed the business opportunity, selected two 20 MT biomass-based units to run storage, ripening, and dehydration in parallel, and facilitated financing through viability gap funding. Policy awareness came through an SOP handbook and documentation guidance, while market linkage support strengthened the enterprise's supply into Pune's wholesale markets.

The two-day deadline disappeared. Mango and banana are now held for around 6 days and cabbage for around 26, so sales are staggered to meet better prices. Mango ripening returned margins of 34% to 44%, while dehydrating banana into powder and ginger lifted margins to between 34% and 65%. Spoilage on perishables fell to 1.5% to 2%. Both units also ripen bananas for a fee, and the operation now provides 8 permanent jobs, 6 of them held by women.





By the Numbers: What Two Units Earn Across the Seasons

Unit 1

Particulars	Mango May – Ripening (8,800 kg 3 cycles ~6 days/cycle)	Mango June – Ripening (2,420 kg 2 cycles ~4 days/cycle)	Cabbage Cooling & Storage (11,000 kg 1 cycle ~26 days)	Banana November – Dehydration (9,000 kg 45 cycles)	Ginger Dec–Feb – Dehydration (31,400 kg 157 cycles)
Expenses (INR)					
Procurement	6,41,080	1,71,820	38,500	1,35,000	9,73,400
Biomass	2,430	1,080	2,730	2,700	7,800
Labour	46,800	20,800	67,600	19,500	66,300
Transport	15,000	3,000	–	1,500	3,750
Total Cost (INR)	7,05,310	1,96,700	1,08,830	1,58,700	10,51,250
Revenue (INR)	12,63,240	2,99,475	78,408	4,50,000	18,84,000
Profit/Loss (INR)	5,57,930 (44%)	1,02,775 (34%)	–30,422	2,91,300 (65%)	8,32,750 (44%)

Unit 2

Particulars	Papaya & Ginger April–June – Storage (13,475 kg 54 cycles)	Ginger October – Dehydration (3,800 kg 20 cycles)	Banana November – Dehydration (9,000 kg 45 cycles)	Banana Dec–Feb – Dehydration (30,800 kg 154 cycles)
Expenses (INR)				
Procurement	3,06,350	1,17,800	1,35,000	6,16,000
Biomass	5,670	1,500	2,700	9,180
Labour	1,40,400	26,000	19,500	66,300
Transport	15,000	5,000	1,500	3,750
Total Cost (INR)	4,67,420	1,50,300	1,58,700	6,95,230
Revenue (INR)	3,28,576	2,28,000	4,50,000	15,40,000
Profit/Loss (INR)	–1,38,844	77,700 (34%)	2,91,300 (65%)	8,44,770 (55%)

Percentages represent profit margin on revenue

Learning from Operations: Ripening and dehydration generated strong returns, but two storage batches ran at a loss. The cabbage batch closed at a loss of INR 30,422. The combined papaya and ginger batch lost INR 1,38,844, mainly due to spoilage: around 2,000 kg (100%) of papaya and 1,200 kg (10%) of ginger were affected. This highlights the need for careful commodity compatibility and storage management in multi-commodity operations.



Service-Based Model – Banana Ripening

Parameter	Unit 1: December (1 cycle ~6 days)	Unit 2: December (1 cycle ~6 days)
Commodity	9,600 kg Banana (Service Model)	9,300 kg Banana (Service Model)
Business Model	Ripening service (INR 3/kg)	Ripening service (INR 3/kg)
Service Revenue (INR)	28,800	27,900
Biomass Cost (INR)	900	900
Labour Cost (INR)	15,600	15,600
Total Operating Cost (INR)	16,500	16,500
Profit (INR)	12,300 (43%)	11,400 (41%)

Percentages represent profit margin on revenue

In December, each unit completed one ~6-day banana ripening cycle on a service basis, together handling 18,900 kg. The table presents the data for each unit separately.





From Farm Gate to Market: The Business Model

**6–8% →
1.5–2%**

Post-harvest loss on perishables cut through controlled storage

~26 days

Longest holding window, up from 1–2 days, ending distress sales

**Below 10% →
up to 65%**

Margins lifted through ripening and dehydration

**8 permanent
jobs**

Local employment created, 6 of them held by women

**3 revenue
streams**

Cooling and storage, ripening (trading and service), and banana and ginger dehydration



What Made It Work

Asset use

Two independent 20 MT units ran storage, ripening and processing side by side, matched to each crop

Holding power

Longer holding windows ended distress sales and lifted price realisation

Sourcing

A reliable farmer aggregation network kept volumes stable through the year

Market access

Direct channels into premium wholesale markets in Pune maximised overall margin

