



Logistics & Warehouse Cost Reduction Strategy

Current Cost Situation

Month	Logistic			Warehouse			Total
	Fixed Costs	Semi-Variable Costs	Variable Costs	Fixed Costs	Semi-Variable Costs	Variable Costs	
Apr-2025	\$4,253	\$1,465	\$13,308	\$1,038	\$1,147	\$558	\$21,770
May-2025	\$4,253	\$1,267	\$17,554	\$1,038	\$1,942	\$920	\$26,974
Total	\$8,506	\$2,733	\$30,862	\$2,076	\$3,088	\$1,478	\$48,744

Logistic Costs

- **Fixed:** Monthly dedicated van rental
- **Semi-Variable:** Fuel, tolls, driver
- **Variable:** Oncall, overtime, overnight, LTL, multidrop, cancellation

Warehouse Costs

- **Fixed:** Monthly management fee, warehouse rent
- **Semi-Variable:** Document handling, loading/unloading
- **Variable:** Overtime, labor overtime

Current Logistics

Month	SLA (Days)	# Dedicated Trucks	Total Volume (kg)	Truck Max Load (kg)	Dedicated Trips	Oncall Trips	Total Trips	Avg Volume/Trip (kg)	Trips/Ded Truck/Month	Trips/Ded Truck/Week
Apr-2025	3	4	132,779	800	63	40	103	1,289	16	4
May-2025	3	4	138,142	800	61	73	134	1,031	15	4

Why Cost Are High


- **Single central warehouse** serves 3 regions (Central 59%, East 23%, West 18%).
- **Long trips:** Avg. **330 km**, max **939 km**.
- **Multi-drop deliveries:** Avg. **1–2 stops**, max **5 stops**.
- Dedicated trucks run full; **on-call needed** to meet demand.
- Shipment volume per trip exceeds max truck load.
- **3-day SLA is fast**—but is it always necessary for farmers?

Logistics Efficiency

Month	Total Shipments Value (USD)	Total Tons Moved	Logistics Cost (USD)	Logistics Cost % of Shipment	Cost per Ton (USD)
Apr-2025	\$138,337	133	\$19,027	13.8%	\$143
May-2025	\$176,879	138	\$23,074	13.0%	\$167

Warehouse Efficiency

Month	Total Shipments Value (USD)	Total Tons Handled	Warehouse Cost (USD)	Warehouse Cost % of Shipment	Cost per Ton (USD)
Apr-2025	\$138,337	133	\$2,743	2.0%	\$21
May-2025	\$176,879	138	\$3,900	2.2%	\$28



Adding More Trucks Simulation

SLA (Days)	# Dedicated Trucks	Total Volume (kg)	Truck Max Load (kg)	Dedicated Trips	Oncall Trips	Total Trips	Avg Volume/Trip (kg)	Trips/DedTruck/Month	Trips/DedTruck/Week	Oncall Trips per Week	Sanity Check
7	5	135,461	800	169	0	169	800	34	8	0	Unrealistic
7	6	135,461	800	169	0	169	800	28	7	0	Unrealistic
7	7	135,461	800	169	0	169	800	24	6	0	Realistic
7	8	135,461	800	169	0	169	800	21	5	0	Realistic
7	9	135,461	800	169	0	169	800	19	4	0	Realistic
7	10	135,461	800	169	0	169	800	17	4	0	Realistic
7	11	135,461	800	169	0	169	800	15	4	0	Realistic

Additional logic:

- Batches per month: 4.29
- Volume per batch: 31,607
- Trips per batch: 40
- Total trips per month: 169

Cost Simulation: Adding More Trucks

Scenario	Warehouses Operated	Dedicated Trucks	Oncall Trips/Month	Logistics Cost (USD)	Warehouse Cost (USD)	Total Monthly Cost (USD)	Cost % of Shipment	Achieves 4%?
Current (Avg Apr + May)	1	4	57	\$21,051	\$3,322	\$24,372	15.5%	✗
Add 4 trucks	1	8	0	\$11,238	\$2,068	\$13,306	8.4%	✗
Add 6 trucks	1	10	0	\$14,048	\$2,068	\$16,116	10.2%	✗

- New rental trucks assumed to replace on-call trucks, ensuring sufficient dedicated capacity.
- Warehouse cost simulation excludes variable expenses like overtime.
- Despite these adjustments, total costs remain well above the 4% threshold.

Adding More Warehouse Simulation

		SND		
WESTERN (CIREBON)	UoM	Unit Price	Proposal to Rize	Monthly Costs
Fixed:				
Storage Charge (WH Rent)	m2/Month	\$2	432 m2	\$1,039
Manpower	Person/Month	\$0	5 person	\$0
Rental Pallet	Unit/Month	\$2	150 unit	\$237
Sub-total Fixed				\$1,276
Semi-variable:				
Document Handling	Doc	\$0	N/A	
Handling in	kg	\$0.02	As per actual	\$538
Handling out	kg	\$0.02	As per actual	\$538
Loading	kg	\$0.00001	As per actual	\$0.4
Unloading	kg	\$0.00001	As per actual	\$0.4
Sub-total Semi-variable	Assuming a 25% allocation from the current amount			\$1,077
Variable:				
Overtime	Hour	\$0	N/A	
Weekday overtime	Hour/Person	\$3	As per actual	
Weekend overtime	Hour/Person	\$3	As per actual	
Sub-total Variable	Assuming no cost			\$0
Total				\$2,353

		SND		
EASTERN (SOLO)	UoM	Unit Price	Proposal to Rize	Monthly Costs
Fixed:				
Storage Charge (WH Rent)	m2/Month	\$2	600 m2	\$1,139
Manpower	Person/Month	\$0	5 person	\$0
Rental Pallet	Unit/Month	\$2	260 unit	\$411
Sub-total Fixed				\$1,551
Semi-variable:				
Document Handling	Doc	\$0	N/A	
Handling in	kg	\$0.01	As per actual	\$280
Handling out	kg	\$0.01	As per actual	\$280
Loading	kg	\$0.00001	As per actual	\$0.2
Unloading	kg	\$0.00002	As per actual	\$0.5
Sub-total Semi-variable	Assuming a 25% allocation from the current amount			\$560
Variable:				
Overtime	Hour	\$0	N/A	
Weekday overtime	Hour/Person	\$3	As per actual	
Weekend overtime	Hour/Person	\$3	As per actual	
Sub-total Variable	Assuming no cost			\$0
Total				\$2,111

Cost Simulation: Adding More Warehouses

Scenario	Warehouses Operated	Dedicated Trucks	Oncall Trips/Month	Logistics Cost (USD)	Warehouse Cost (USD)	Total Monthly Cost (USD)	Cost % of Shipment	Achieves 4%?
Current (Avg Apr + May)	1	4	57	\$21,051	\$3,322	\$24,372	15.5%	✗
Add 2 warehouses	3	4	0	\$5,619	\$7,046	\$12,665	8.0%	✗

- Two new warehouses shorten trip distances, reduce multi-drops, and eliminate on-call trucks.
- Despite these improvements, total costs remain above the 4% threshold.

Benchmark

Industry Benchmark Source	Company	Sales	Logistic	Logistic % of Sales
State-Owned Company	PT Pupuk Kaltim	\$1,277,454,873	\$12,427,215	1.0%
Listed Company	PT Saraswanti	\$303,642,980	\$28,342,844	9.3%
Listed Company	PT Delta Giri	\$213,488,418	\$14,254,937	6.7%