

Industrial Research, Process Optimization, and Commercial Production of Sweet Potato-Based Starch

Project Budget

Project Info

Project Lead: Yusuf I. Ibrahim
Start Date: 1/1/2026

Budget Summary

Actual	Budget
\$ 48,756,000	\$ 48,756,000

Tasks	Labour		Items/Materials			Actual	Budget
	Qty	Rate	Units	₦/Unit	Other		
SECTION 1 — SITE PREPARATION & CIVIL WORKS						₦ 3,000,000	₦ 3,000,000
Site clearing, grading & leveling	1	₦ 800,000.00				800,000.00	800,000.00
Foundation works for equipment base & flooring (concrete + steel mesh)	1	₦ 1,200,000.00				1,200,000.00	1,200,000.00
Drainage & effluent channeling	1	₦ 500,000.00				500,000.00	500,000.00
Access road & signage	1	₦ 500,000.00				500,000.00	500,000.00
SECTION 2 — BOREHOLE CONSTRUCTION & WATER SYSTEM						₦ 3,500,000	₦ 3,500,000
Borehole drilling (60–80 m depth, PVC casing)	1	₦ 1,200,000.00				1,200,000.00	1,200,000.00
Stainless submersible pump (3 HP)			1	₦ 500,000.00		500,000.00	500,000.00
2,000 L overhead tank + galvanized stand			1	₦ 450,000.00		450,000.00	450,000.00
Piping, valves, fittings & plumbing			1	₦ 400,000.00		400,000.00	400,000.00
Water filtration & treatment unit (sand, carbon, UV)			1	₦ 600,000.00		600,000.00	600,000.00
Electrical & pump control installation	1	₦ 350,000.00				350,000.00	350,000.00
SECTION 3 — POWER SUPPLY (40 kVA DIESEL GENERATOR)						₦ 5,000,000	₦ 5,000,000
FG Wilson P40 or Cummins 40 kVA Generator (Perkins engine)			1	₦ 4,800,000.00		4,800,000.00	4,800,000.00
Installation, ATS panel & cabling	1	₦ 200,000.00				200,000.00	200,000.00
SECTION 4 — RAW MATERIAL PROCUREMENT (Sweet Potato & Inputs)						₦ 6,000,000	₦ 6,000,000
Fresh sweet potato tubers (₦120/kg × 50 tonnes)			120	₦ 50,000.00		6,000,000.00	6,000,000.00
SECTION 5 — MACHINES, EQUIPMENT & FABRICATIONS						₦ 24,256,000	₦ 24,256,000
Pulper/Rasper (SS304, 7.5 kW)			1	₦ 2,200,000.00		2,200,000.00	2,200,000.00

Tasks	Labour		Items/Materials			Actual	Budget
	Qty	Rate	Units	₹/Unit	Other		
Paddle washer + destoner (SS304)			1	₹ 1,200,000.00		1,200,000.00	1,200,000.00
Centrifugal sieve + hydrocyclone			1	₹ 2,800,000.00		2,800,000.00	2,800,000.00
Peeler centrifuge / filter press			1	₹ 2,000,000.00		2,000,000.00	2,000,000.00
Flash/cabinet dryer (native starch)			1	₹ 2,500,000.00		2,500,000.00	2,500,000.00
Stainless mixing & storage tanks			3	₹ 600,000.00		1,800,000.00	1,800,000.00
Agitated reactors for adhesives			2	₹ 900,000.00		1,800,000.00	1,800,000.00
Syrup evaporator (vacuum kettle type)			1	₹ 1,600,000.00		1,600,000.00	1,600,000.00
Rotary dryer for feed			1	₹ 1,000,000.00		1,000,000.00	1,000,000.00
Hammer mill + pelletizer			2	₹ 1,000,000.00		2,000,000.00	2,000,000.00
Laboratory & QC instruments			1	₹ 1,200,000.00		1,200,000.00	1,200,000.00
Stainless product conveyors + bins			2	₹ 700,000.00		1,400,000.00	1,400,000.00
Procurement: Drum Dryer (CWS starch)			1	₹ 2,756,000.00		2,756,000.00	2,756,000.00
SECTION 6 — PACKAGING & CONSUMABLES						₹ 4,000,000	₹ 4,000,000
Pillow-type sachet packaging machine (VFFS, 10–1000 g)			1	₹ 4,000,000.00		4,000,000.00	4,000,000.00
SECTION 7 — LOGISTICS, TRAINING & UNFORESEEN						₹ 3,000,000	₹ 3,000,000
Local logistics & transport (tuber inflow, product dispatch)			1	₹ 1,500,000.00		1,500,000.00	1,500,000.00
Staff & technician training/workshops			1	₹ 700,000.00		700,000.00	700,000.00
Administrative & unforeseen expenses			1	₹ 800,000.00		800,000.00	800,000.00