



Finance Model for 1 Acre Aquaponic Farm Project
Climate Controlled Greenhouse

Vegetables	3,228	sqft	300	sqm
Greens & Herbs	11,836	sqft	1100	sqm
Aquaculture	3,012	sqft	280	sqm
Plant Nursery	1,358	sqft	126	sqm
Hatchery	1,358	sqft	126	sqm
Total Producing Footprint	18,076	sqft	1,932	sqm

Total Greenhouse Area	44,000	sqft	4,088	sqm
Retail/Common Area	-	sqft	0	sqm
Storage Area	783	sqft	73	sqm
Packaging & Processing Area	1,567	sqft	146	sqm

Capital Costs

Greenhouse	\$ 245,256.00	\$	245,256.00
Civil Fabrication	\$ 52,800.00	\$	52,800.00
Storage	\$ 13,200.00	\$	13,200.00
Accommodation	\$ 10,560.00	\$	10,560.00
Power Back up	\$ 44,000.00	\$	44,000.00
FRP Tanks	\$ 66,000.00	\$	66,000.00
Filtration	\$ 9,900.00	\$	9,900.00
Aeration	\$ 40,005.61	\$	40,005.61
XPS Boards	\$ 7,397.50	\$	7,397.50
Pumps & Plumbing	\$ 33,000.00	\$	33,000.00
Electrical	\$ 33,000.00	\$	33,000.00
Misc Supplies	\$ 18,150.00	\$	18,150.00
Special Equipment	\$ 11,000.00	\$	11,000.00
Tilapia Hatchery	\$ 9,000.00	\$	9,000.00
Vehicles	\$ 88,000.00	\$	88,000.00
Labour	\$ 79,200.00	\$	79,200.00
Technology	\$ 100,188.00	\$	100,188.00
Total	\$ 860,657.11	\$	860,657.11

Contingency	\$ 215,164.28	25% Total	\$ 215,164.28	
Duties, Taxes, Levies	\$ 43,032.86	5% of Material	\$ 43,032.86	5% of Material
Shipping & Transport	\$ 43,032.86	5% of Material	\$ 43,032.86	5% of Material
Total w/Contingency	\$ 1,161,887.10	Est Capex	\$ 1,161,887.10	

Operational Expenses

Electricity	\$ 32,694	\$0.1/KWh	\$ 32,694	\$0.1/KWh
Crop Seed	\$ 3,780		\$ 3,780	
Fish Feed	\$ 117,360	\$4.00/lb	\$ 117,360	\$8.00/kg
Production Costs	\$ 40,516	\$0.15/lb/month	\$ 40,828	\$0.33/kg/month
Packaging	\$ 15,133	\$0.01/lbs	\$ 15,133	\$0.025/kg
Additives	\$ 4,477	~\$21.68/net wt	\$ 4,477	~\$21.68/net wt
Salaries & Wages	\$ 440,000	/year	\$ 440,000	/year
Technology Fee	\$ 8,000	/year	\$ 8,000	/year
Total	\$ 661,959	/year	\$ 662,271	/year

Production & Cash Flow

Greens & Herbs				
Yield	270,104	lbs/yr	122,496	kg/yr
Sale Price	\$ 2.36	\$/lb	\$ 5.21	\$/kg
Raw Income	\$ 637,444.68	\$/yr	\$ 638,204.16	\$/yr
Vegetables				
Yield	121,634	lbs/yr	55,163	kg/yr
Sale Price	\$ 2.36	\$/lb	\$ 5.21	\$/kg
Raw Income	\$ 287,056.25	\$/yr	\$ 287,398.26	\$/yr
Fish (Modeled for Tilapia)				
Yield	39,228	lbs/yr	17,793	kg/yr
Sale Price	\$ 2.36	\$/lb	\$ 5.21	\$/kg
Raw Income	\$ 92,577.31	\$/yr	\$ 92,702.99	\$/yr
Total Cash Inflow	\$ 1,017,078.24		\$ 1,018,305.41	

Financial Overview

Capital Cost	\$ 1,161,887.10	\$	1,161,887.10
Operational Cost	\$ 661,959.07	/yr	\$ 662,271.44
Income	\$ 1,017,078.24	/yr	\$ 1,018,305.41
Payback Period	3.27	yrs	3.26