INMED'S JAMAICA ADAPTIVE AGRICULTURE PROGRAM

COST SHEET FOR MEDIUM-SIZE COMMERICAL AQUAPONICS SYSTEM CONSTRUCTION & OPERATIONS (1 YEAR

ITEM	COST (USD) ONE (1) UNIT	DESCRIPTION
Construction and Installation of Aquaponics System and Climate-Smart Components		
Forms and lumber	$ 900	Frames for site delineation, fish tanks and plant grow beds
Construction materials	$ 5,000	Block, cement, steel rebar, pipes and fittings, etc. to construct system
Sand and gravel	$ 2,000	Material for construction and grow beds, subject to proximity to source and delivery
Ground preparation	$ 200	Tractor use and other land preparation activities, subject to ground conditions
Water pump and timer	$ 500	Pump, timer and associated electrical system to regulate water flow (powered by solar energy and/or grid)
Water harvesting system	$ 800	1,000-gallon plastic tank and piping for rainwater harvesting and use in aquaponics system to conserve water resources
Greenhouse-like cover and basic structure	$ 2,000	Plastic cover over basic wood frame to protect against extreme weather (sun and rain) and pests (easily removable in case of hurricanes or other high wind events)
Solar power system	$ 5,000	Panels, mounts, inverter, controller, batteries, cables and breakers to save energy and long-term operational costs (electricity) and avoid product loss (from grid power outages)
Seedling nursery	$ 1,000	Materials to build separate structure to cultivate seedlings to protect and produce more rapidly for transplanting to aquaponics system
Skilled construction labour	$ 5,600	Technicians and builders contracted to construct and install aquaponics system & components
Materials Delivery	$ 2,000	Truck delivery of components for aquaponics system and resiliency components
Subtotal Start-Up Costs	**$ 25,000**	

Annual Operational Costs of Aquaponics System Production		
Fingerlings and delivery	$ 1,000	Sourced locally (e.g., from Ministry of Agriculture)
Fish feed	$ 1,500	For fish growth in tanks: 5000 lbs (for 4000 fish)=100 bags @$15 ea annually
Seeds	$ 200	To start seedlings that are transplanted to grow beds
Soil trays	$ 100	To start seedlings that are transplanted to grow beds
Water additives	$ 100	For system-wide water quality
Approved natural pesticides	$ 100	For plant health, safe for fish and humans (e.g., entomopathogens)
Packaging	$ 500	For product storage and sale
Transportation	$ 500	Delivery of inputs and distribution of produce
Subtotal Operational Inputs	**$ 4,000**	
TOTAL COST	**$ 29,000**	

*NOTE: These prices are approximate. Prices can vary based on location and other circumstances.

ITEM	COST (USD)	DESCRIPTION
	ONE (1) UNIT	
Other OPTIONAL Items for an Aquaponics System		
Heavy equipment	COSTS CAN VARY. CHECK YOUR LOCAL MARKET FOR PRICING.	For land grading and prep, if necessary
Aerator		For removing dissolved gases from water
Sorting and Packaging Site		To sort and prepare harvested produce for the market
Security System		To protect system from theft and animals
Shade cloth/netting		To provide shade to plants