

# Uganda



**Organization:** SAMPLE Uganda Aquaculture Association

**Location:** Kampala, Wakiso, Uganda

**Solution:** Introducing aquaponics for resilience and empowerment in Uganda

**Factsheet Period:** First round of UNDP AFCIA funding (18 months)



**A demonstration guiding the population through the stages of aquaponic activities in Buganda, Uganda @SAMPLE**

Food insecurity poses a stubborn challenge in Uganda, where the average person consumes 400 kcal less than their daily intake requirements ([World Food Programme, 2024](#)). Smallholder farmers, who rely on rain-fed agriculture, are highly vulnerable to climate change. The Sample Uganda Inspired 'Aquaponics Technology Distribution for Multiple Resiliencies and Empowerment' (ADMIRE) intervention introduces aquaponics—a system that combines fish farming with vegetable cultivation—to improve nutrition and income. Using a cost-effective, modular design made from local materials, the initiative provides communities with aquaponics kits through a lease-to-own model. By promoting sustainable food production, the solution enhances resilience to climate change while making innovative farming more accessible to low-income communities.



## Key achievements

- Provided over 38,253 people (67% women) with increased access to fresh, nutritious food.
- Achieved an 80% increase in income for ADMIRE-supported households. Over 60% additional disposable income from Aquaponics enterprises, funding small household expenses.
- Supported 18,000 households in operating ADMIRE micro-enterprises, including fish/vegetable processing, vegetable cultivation, etc.
- Conducted 12 training programmes for 720 participants, including aquaponics experts, small-scale farmers, investors and community organizations, providing them with essential aquaponics skills.
- Enhanced the efficiency of aquaculture-aquaponics integration by procuring and installing a fish-pelleting machine.



## Adaptation benefits

- Water conservation (aquaponics uses 90% less water than traditional farming)
- Closed-loop system provides controlled environment, protecting crops and fish from extreme weather events
- Strengthened local food security and reduced carbon footprint and risks from external food supply chains



## Social impact

- Enhances water, food and income security of participating households
- Training programmes equip community members with the skills to manage aquaponic systems and engage in sustainable agricultural practices



## Innovation

- Pioneered a modular 2sqm ADMIRE Aquaponics Kits integrating fish tanks, grow beds, poultry cages and flood tanks
- Implemented a customer-friendly lease-to-own model in partnership with Savings and Credit Cooperatives
- Designed affordable, customized ADMIRE Micro Aquaponics systems require minimal resources
- Promoted sustainable local food production and efficient water use, particularly suited for urban environments



## Replication potential

- Water-efficient aquaponics systems are suited to urban and peri-urban settings
- Adaptable design allows customization based on user needs and budget constraints, increasing accessibility



## Funding snapshot

- UNDP-AFCIA grant: US\$235,000 (first grant: \$125,000; scaling grant: \$110,000- under implementation- data still unavailable)
- Roddenberry Foundation: \$12,000
- National Apex Cooperative Society Contract: \$255,000

## Investability

Sustaining criteria	Pursuing dual-pronged funding approach: The business model is primarily driven by a lease-to-own approach (76%), with additional revenue from outright purchases (15%) and installment payments alongside philanthropic funding for non-profit activities. This structure enhances accessibility while ensuring long-term financial sustainability.
Financial innovation	Initiative currently has an average monthly operational cost of \$100,000. Generating \$187,000 in revenue through a lease-to-own model for aquaponics kits with additional revenue expected from lease payments and produce sales.
Expected Return	<p>The lease-to-own model eliminates upfront costs, expanding access to aquaponics while ensuring steady revenue generation and a sustainable return on investment.</p> <p>Seeking partnership with financial institution to pilot a loan programme for SACCO members.</p>