



**INMED**  
**Partnerships for Children**  
*Healthy Children, Bright Futures*



TRANSFORMING LIVES THROUGH

# **ADAPTIVE AGRICULTURE & AQUAPONICS**

Creating Avenues for Success in Vulnerable Communities

<https://inmed.org/aquaponics>



# THE FUTURE OF FARMING



## INCOME GENERATION

Sustainable food systems represent one of the greatest development challenges of the coming decade, especially in the age of climate change. INMED Partnerships for Children is a global leader in facilitating adaptive agriculture and aquaponics projects in developing regions to help vulnerable communities thrive physically, socially and economically.

Aquaponics is an innovative farming technique that combines aquaculture (fish farming) with hydroponics (soilless crop production) into a closed system that is resilient to erratic and destructive climate change events.

INMED has developed a simple, scalable and low-cost system using easily accessible "off the shelf" local materials that can provide year-round sustainable produce and fish for families, small-scale farmers, communities, schools, businesses and government institutions.



## FOOD SECURITY

*"Aquaponics provides small farmers the opportunity to carve out a niche market that would not be available through traditional farming methods."*

—Thad Jackson, Ph.D.  
INMED Partnerships for Children



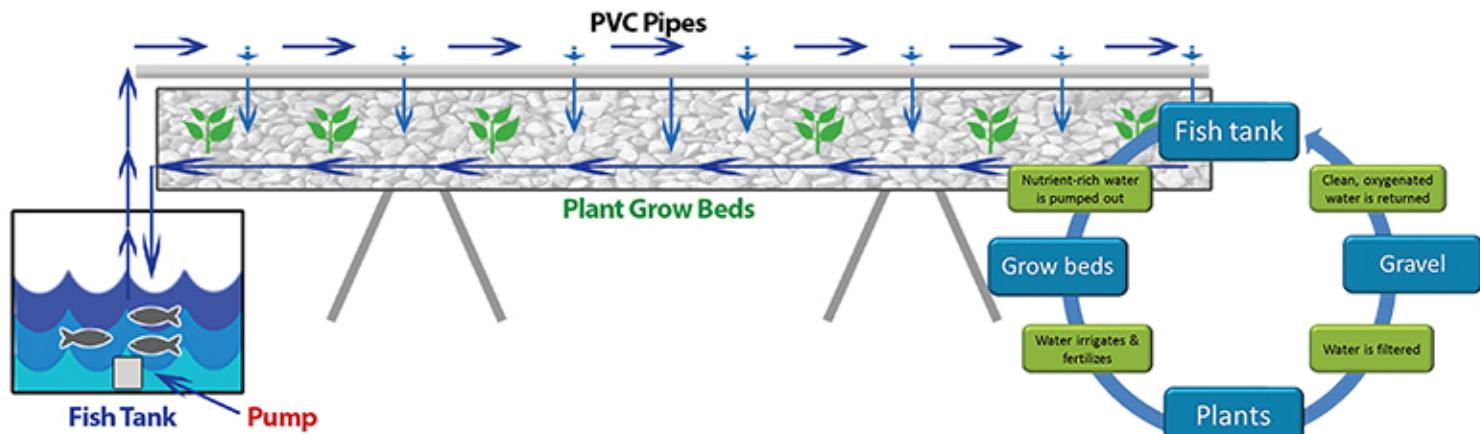
## CLIMATE CHANGE RESILIENCE

Benefits of aquaponics include:

- Crop production at least 10 times higher than equivalently sized plots traditionally cultivated.
- 85-90% less water consumption than traditional irrigation.
- No chemical fertilizers or pesticides.
- Energy consumption substantially less than mechanized agriculture.
- Year-round crop production.
- Significantly less labor than traditional farming, making it accessible to individuals with disabilities, beneficial for female-led households and attractive to youth.

INMED has installed a variety of home and commercial aquaponic systems around the world to promote income generation, access to fresh and nutritious foods and greater ability to adapt to climate change, as well as to address complex public health challenges.

# HOW AQUAPONICS WORKS



INMED's simple ebb-and-flow design eliminates the need for expensive and complex filters and oxygenation systems. Composed of fish tanks, grow beds and pumps, the entire system is built on the project site using common building materials.

Units are designed to fit space available and production objectives—from individual family-sized units to commercial

systems of various sizes. Water from the fish tanks is pumped to the grow beds through a PVC pipe to filter the fish nutrients through the gravel before exiting through troughs or pipes to return as filtered water to the fish tanks. The units include a back-up battery system to protect against power outages. In some locations, INMED utilizes solar power. Aquaponics is projected to become a \$1 billion industry by the year 2020.

## HOW INMED IS APPLYING AQUAPONICS TO IMPROVE LIVES

### Jamaica

**Mission:** To address urgent climate-related threats, degraded soils and water quality, water scarcity, food insecurity, economic decline and deforestation.



**Current Focus:** Stable source of produce and tilapia, income and training for a variety of vulnerable communities, including a residential facility for individuals with disabilities, a juvenile correctional facility, two technical high schools and farming cooperatives.

**The Future:** Greater access to financing, technical assistance, ongoing training and value chain/market development for small-scale farmers, women and youth via INMED's new 4-year training program. Learn more at <https://inmed.org/aquaponics>.

### Peru

**Mission:** To improve health and nutrition, environmental impacts of climate change and economic opportunities for disadvantaged and indigenous populations.



**Current Focus:** School-based systems to provide impoverished

communities access to nutritious food, research and employment opportunities for indigenous university students and protection/proliferation of endangered indigenous Amazonian fish species due to over-fishing.

**The Future:** Establishment of a Center for Aquaponics Innovation, Research and Production as well as expanded training initiatives in new regions.

### South Africa

**Mission:** To foster climate-change adaption, improve food security, address widespread malnutrition and create economic development opportunities in southern Africa.



**Current Focus:** Sustainable sources of tilapia, catfish, carp and fresh produce to provide nutritious meals to thousands of disadvantaged school children, year-round crop production in desert regions and increased income and employment opportunities for small-scale farmers, people with disabilities, women and youth.

**The Future:** Increased emphasis on training and regional expansion. Learn more about INMED's 2-Day Aquaponics Training at the link below.

# CREATING STABILITY & OPPORTUNITY FOR ALL CHILDREN

## OUR STORY



INMED Partnerships for Children is a nonprofit international development organization that has worked in more than 100 countries to create a world where all children are safe, healthy, educated and have access to opportunities to thrive. We work toward this mission by mobilizing, supporting and providing expertise to improve the health and well-being of vulnerable children and families. Through our multi-sector partnerships, INMED builds effective systems that deliver innovative and sustainable approaches to break complex cycles of poverty and generate opportunities for success. Our programs in maternal and child health, disease prevention and education and adaptive agriculture/aquaponics have made a sustainable impact on the lives of millions of children and their families since 1986. Join our cause by becoming an INMED partner, supporter or volunteer.

## OUR IMPACT

*"We were suffering a lot ... INMED has changed our lives. I see a lot of success in our project and we are going to generate much more profit."*

—Pietrus Moshoeshoe  
Farm co-op leader

*"It warms our hearts how eagerly the children take to aquaponics and school gardens—and how their enthusiasm ripples out into the families and communities to make a sustainable impact on many lives."*

—Primary school teacher

*"INMED has given us our hope and confidence back, and we now see ourselves becoming commercial farmers, and for that we will always be grateful."*

—Small-scale farm co-op member

*"Our group is now totally different ... because now we co-op members have a good commitment and cooperation, and with INMED we're moving forward. Our project is growing bigger and bigger."*

—Rosie Mateko  
Monyakeng cooperative for the Disabled

## CONTACT US

INMED Partnerships for Children — International Headquarters  
21240 Ridgetop Circle  
Suite 115  
Sterling, Virginia 20166  
Phone: 1+ 703-729-4951  
Web: <https://inmed.org>

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