Jamaica



Organization: I-SEEED Youths Limited
Location: Portmore, St. Catherine, Jamaica
Solution: Climate-smart greenhouse farming for women and young people affected by gender-based violence
Factsheet Period: First round of UNDP AFCIA funding (16 months); Second round of UNDP AFCIA funding (12 months)



Solar-powered greenhouse technology initiative involves and empowers women in Portmore, Jamaica @ I-SEEED

Jamaica's food systems are highly vulnerable to the impacts of rising sea levels and extreme weather events, compounded by price volatility and inflation of its food imports. Jamaica currently imports 60% of its food, despite its significant potential for food security from nutritious local foods, compared to other Small Island Developing States (FAO, 2022). I-SEEED aims to strengthen local agriculture in Portmore by engaging young people and women affected by gender-based violence, providing them with opportunities to break the cycle of violence and build sustainable livelihoods. Through solar-powered greenhouses, participants gain access to climate-smart farming techniques and greenhouse management training, equipping them with skills that enhance their resilience to climate change and boost food security. In addition, I-SEEED Youths creates pathways for meaningful employment and entrepreneurship, fostering economic empowerment and long-term community resilience.

Key achievements

- Constructed 7 greenhouses, enabling year-round production, improved crop quality and more stable yields, while creating a foundation for increased income, food security and hands-on training.
- Installed 10 wastewater tanks, with 5 additional tanks purchased to enhance water storage capacity.
- Created 40,000 square feet of sustainably managed land
- Rehabilitated 10.93 hectares of degraded land.
- Increased awareness of agricultural best practices among 150 at-risk young people, women and men, and offered capacity building for 10 I-SEEED Youths team members.
- Trained 594 at-risk individuals in entrepreneurship (63% women); 651 in crop care and disaster risk management (65% women) and 360 young people.
- Reached a total of 717 women and girls through 'Empower HER' Workshop Series, delivering training on farming as a business, entrepreneurship, crop care, disaster risk management and gender-based violence awareness, complemented by ongoing empowerment sessions.
- Strengthened programme sustainability and outreach through continuous capacity building of the implementing team, growing interest from partners, expanding into monthly school-based programmes, including requests for replication in local schools.
- Scaled up seedling production and planting (468,980 seedlings planted) across greenhouse and open-field systems, resulting in strong crop establishment, early yield potential and the emergence of a new income stream through seedling sales, while strengthening local food production and supply.

Key achievements

- Generated income by community members, by applying acquired skills—producing and selling crops and seedlings, expanding their product range and tapping into local market demand with limited competition.

Social impact

- Supports young people and women who are survivors of gender-based violence to obtain safe, sustainable and meaningful livelihoods.
- Reduces gender-based violence and crime by creating pathways to employment and economic independence through agricultural training.

Adaptation benefits

- Strengthens climate resilience among vulnerable community members thanks to a solar-powered greenhouse technology and innovative irrigation systems.
- Promotes climate-smart agricultural practices, such as crop selection and care, pest management, plant nutrition and water conservation.

Innovation

- Pioneers sustainable agriculture by integrating climate-smart technologies.
- First of its kind in the region, integrating community-based greenhouse farming for at-risk groups (marginalized young people vulnerable to crime and violence, and women affected by gender-based violence).
- Implements quality control training to meet the Bureau of Standards for food safety.
- Finalizing export licenses to scale products beyond local markets, unlocking future growth opportunities.









Replication potential

- Profits from produce sales enable expansion and employment.
- The uniqueness of the initiative in the area can attract eco-tourism and neighbouring communities.
- The greenhouse model can be replicated in other regions to promote sustainable agriculture and community resilience.

Funding snapshot

- UNDP-AFCIA grant: US$235,000 (initial grant: $125,000; scaling grant $110,000)
- UNDP Global Environment Facility Small Grants Programme: $50,000
- UNDP Jamaica Country Office: $10,000
- Crowdfunding: $168,910
- National Conservation Trust Fund of Jamaica: $9,000
- In kind contributions: $10,000

Investability	
Sustaining criteria	Currently fully funded by grants, as greenhouse investments are yet to break even. This initiative aims to explore blended finance options in 4-5 years
Financial innovation	Produce revenue will become self-sustaining upon completion of 2025 Individual referrals and donor partnership management to sustain business model Established Farmers' Groups and Support Groups to ensure long-term peer learning and business growth
Expected return	3 major fundraising activities per year as a source of alternative finance Strengthened and diversified revenue streams through the introduction of community profit-sharing mechanisms (10% of farmers' earnings), expansion into new products and training services, and capacity-building support for local government and private sector actors Participants' monthly income increased from US$300 to $550

ADAPTATION FUND Climate Innovation Accelerator

ADAPTATION FUND

To read their story, visit UNDP-AFCIA

To watch their video, click here

To contact the initiative, visit I-SEEED Youths