

Jamaica



Organization: I-SEED 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)



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

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-SEED 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-SEED Youths creates pathways for meaningful employment and entrepreneurship, fostering economic empowerment and long-term community resilience.



Key achievements

- Constructed one greenhouse, procured and sowed seeds, and promoted the capitalization of high seedling demand as it is the only nursery in Portmore and its surroundings
- Installed 10 wastewater tanks, with five additional tanks purchased to enhance water storage capacity
- Increased the income of 45 individuals through training in agricultural and business skills
- Created 40,000 square feet of sustainably managed land
- Increased awareness of agricultural best practices among 150 at-risk young peoples, women and men, and offered capacity building for 10 I-SEED Youths team members



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



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



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



Funding snapshot

- UNDP-AFCIA grant: US\$125,000 (initial grant)
- UNDP Global Environment Facility Small Grants Programme: \$50,000
- UNDP Jamaica Country Office: \$10,000
- Global Giving: \$10,000
- 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
Expected return	3 major fundraising activities per year as a source of alternative finance New revenue sources such as community profit sharing mechanisms (10% of farmers' earnings) and training for the local government and private businesses