Fiji

Organization: Smart Farms Fiji Foundation
Location: Western Division, Fiji
Solution: Promoting resilient food systems in Fiji's informal settlements
Factsheet Period: First round of UNDP AFCIA funding (18 months)

Rinesh Sharma, director of Smart Farms Fiji Foundation, demonstrating hydroponic cultivation @SFFF

By 2050, climate change could push an additional 32,000 Fijians into poverty and cost the country 6.5% of its GDP every year (World Bank, 2017). Fiji's agriculture sector is at risk, due to most of its prime land being located in coastal areas affected by rising sea levels, soil erosion and tidal surges. This vulnerability is exacerbated by inadequacies with the current food production systems, a lack of innovation in farming practices. The Smart Farms Fiji Foundation solution introduces hydroponic farming, an innovative, tested method to build agricultural resilience in communities that requires less water than traditional agriculture, allows greater plant diversification, and allows for easy relocation during extreme weather events. This initiative aims to improve food security at the household level, increase awareness of climate-smart farming technologies, and build resilience to climate change at the community level.

Key achievements

- 150 households provided with hydroponic equipment and training guidebooks, including follow-up technical support visits
- Hydroponic kit user-guide manuals developed for community use
- 150 people trained in hydroponic techniques and agri-entrepreneurship with 50% female participation.

Social impact

- Promoted sustainable farming practices and community-based nutrition education to combat hunger and malnutrition in rural communities
- Enhanced farming skills and capacity, building resilience and sustainable agricultural practices for continuous sustainable production and consumption

Adaptation benefits

- Hydroponic techniques require less water than traditional agriculture, allowing for greater plant varietiesThe portability of hydroponic units enables safe storage during extreme weather events
- Utilizes cost-effective and environmentally friendly materials like coconut husks and river rocks as growing mediums

Innovation

- Combines traditional agricultural practices with climate-smart farming, integrating next-generation technology with local cultural knowledge
- Equipment built locally in the Fiji Islands, using raw materials and labour while respecting Fijian culture and authenticity

Replication potential

- Hydroponic systems are scalable, allowing participants to grow more in limited spaces
- Climate-smart training modules equip participants with knowledge and skills for transformative shifts to scaled-up soil or soilless farming
- Potential to further expanded to neighbouring communities through workshops

Funding snapshot

- UNDP-AFCIA grant: $60,000 (initial grant)

ADAPTATION FUND Climate Innovation Accelerator

ADAPTATION FUND

To learn more, visit UNDP-AFCIA

To contact the initiative, visit Smart Farms Fiji