



Agroecology for planetary health in Small Island Developing States

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Introduction

- Food systems facing mounting challenges from environmental degradation, climate change, and diet-related illnesses
- Urgent need to rethink how food is produced, consumed, and valued.
- Small island states (SIDS), experience high rates of nutrition related diseases and fragile ecosystems.
- Malnutrition and food imports in SIDS
 - 50 to 80% with overweight / obesity
 - 10 to 30% with diabetes
 - 15 to >30% dying prematurely from a diet related illness

Research Question

What is the potential for **improving household diet, nutrition, and food security** and reducing the burden of nutrition related diseases by promoting **community-based food production based on agroecological principles**?



“Planetary health is unachievable without major changes in the way food is produced, distributed and consumed”

- Agroecology** provides a framework for a ‘Systems’ approach by
 - applying ecological concepts and principles to the design and management of sustainable food systems.



Transdisciplinary Approach

Public health, agricultural, and social scientists working together in four countries, Fiji, the Philippines, St Vincent and St. Lucia, with local communities to:

- map the local food system with **Multi-stakeholder Group Model Building**
- set up **Living Laboratories** for collaborative testing of alternative agri-food system practices in real-life conditions
- track change with baseline and follow up monitoring of **KPIs devised using Theory of Change**

Small Island Locations



Data collection tools

- UNFAO Tool for Agroecological Performance Evaluation (TAPE)
- Household Dietary Diversity Survey / Intake 24,
- Qualitative focus groups and interviews

- Outcome 1.** Improved diet diversity -> Household dietary diversity score
- Outcome 2.** Increased crop yields -> Food sufficiency, Food insecurity experience scale
- Outcome 3.** Improved household nutrition -> No. portions of different food groups consumed



Outcome 4. Improved production diversity -> No. crop types grown, No. crop species in each food group

Outcome 5. Boosted crop sales & income -> Household income from agriculture vs input costs

Outcome 6. Improved soil quality -> Soil health survey, use of recycled organic waste

Outcomes 7. Increased knowledge -> Uptake of new practices



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