

GCF Project Concept





Context

Caribbean Agriculture:

- 7% to 17% agriculture contribution to GDP
- 2.5 acres average farm size
- >90% crops grown in soil
- >9% of agricultural losses are from hydro-meteorological hazards (2X global average) with drought accounting for the highest cost of loss & damage
- 7 of the most water-stressed countries are in the Caribbean
- <10% of farms are irrigated
- 30% of degraded lands in SIDS are in the Caribbean
- >5% of GDP/year estimated economic impact of climate change for Caribbean SIDS (>world average), with costs projected to surpass US\$ 22billion per year by 2050
- Farmers are among the poorest and most vulnerable people in the region



Problem Statement

Problem:

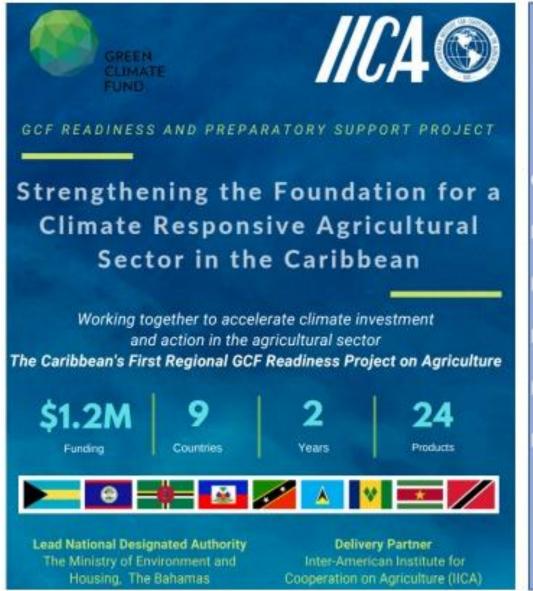
Over 70, 000 Caribbean farmers are highly vulnerable to the impacts of climate change (hydrometeorological hazards):

- Water insecurity
- Soil health: carbon sequestration potential
- Livelihoods
- Food & Nutrition Security

Objective(s):

To increase the resilience to climate change among the most vulnerable farmers in the Caribbean and strengthen capacity (public and private) to support communities in adapting to climate change





Stakeholder Engagement

Mechanisms

Climate Action Inventories

NDC Analysis

GHG Inventories

Barrier Analysis

Trade-Off Analysis

Youth engagement and

certification

Case Studies

Knowledge Portal

2 regional proposals

Engagement and Participation

Information and Evidence

Development



Transformational Argument



Step 1

De-risking Investment in the Farming Enterprise (Climatic & Vulnerabilities)



Step 2

Increasing Farm Equity, Confidence to Invest in Agriculture and Stability of Farming Enterprise



Step 3

Leverage Investment Security for Business Continuity (better financing & public and private relations)





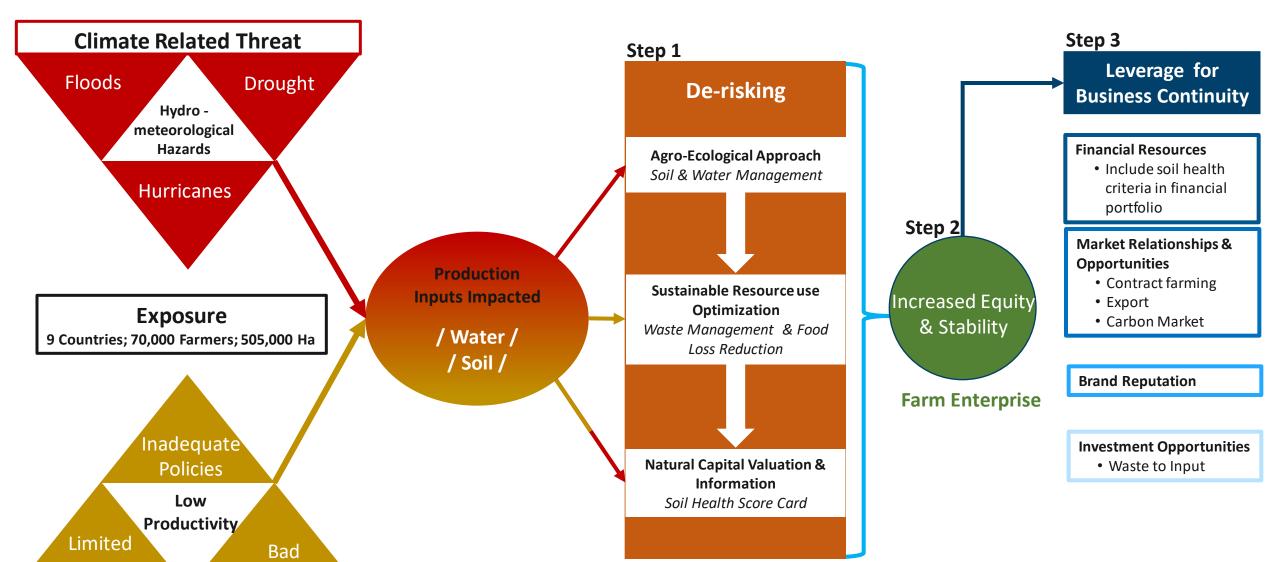


Information

Vulnerabilities

Practices

Project Concept





Agro-Ecological Approach



Agroecology

Water Management

Soil Management

Main Activities

Quality & Availability: Energy, Efficiency, Cost Effectiveness
Governance (supplier/user relations)
Water Smart Agriculture
On-Farm Technology

Climate Resilient Soil Health & Policy
Fertilization (nitrogenous fertilizers)
Soil Conservation
Agro-Chemicals

Informed by:

Climate Information System

Agroecological Zoning



Sustainable Resource Use Optimization

Derisking

Sustainable Resource Use Optimization







Natural Capital Valuation & Information

Derisking

Natural Capital Valuation & Information

Climate Smart Soil
Health Score Card

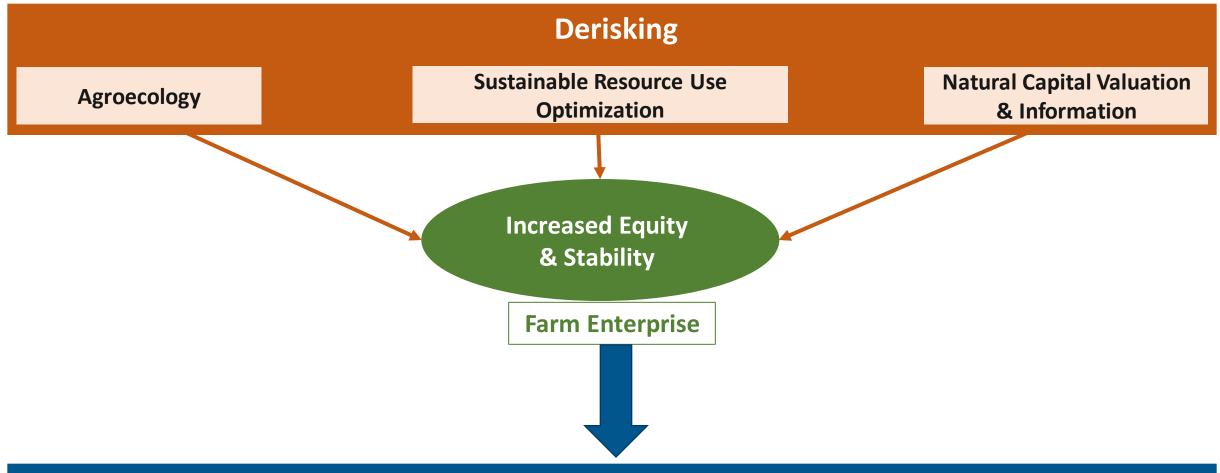
Main Activities

Measure & Map Soil Health
Data Information System
Valuation System for Soil Health: Assest

Rationalization & Accounting



Increased Equity & Stability



Leverage for Business Continuity

Financial Resources

 Include criteria in financial portfolio

Market Relationships & Opportunities

- Contract farming
- Export
- Carbon Marker

Investment Opportunities

Waste to Input/Resource

Brand Reputation



Sustainable Resource Use Optimization

Leverage for Business Continuity

Financial Resources

Access to
Finance

Soil Health - Part of Loan Criteria
• Credit Unions
• Local Development Banks
Criteria Government Incentives



Leverage for Business Continuity

Leverage for Business Continuity

Investment Opportunities

Private Sector

Waste to Resource: Business
Opportunity



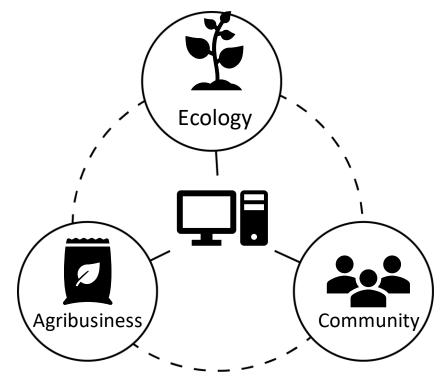


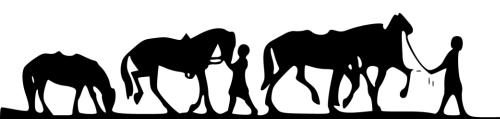


MEAL [Mobile Exchange Agri-produce Link]

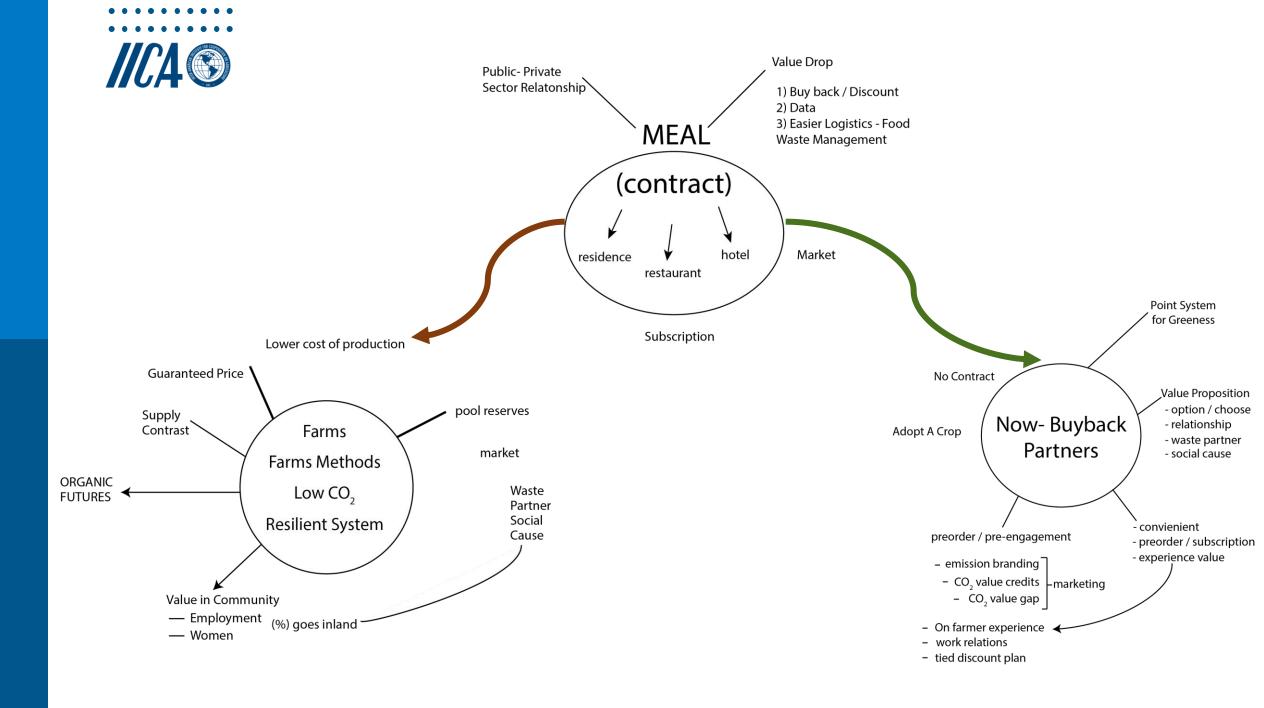
Solution: Mobile Exchange Agri-produce (MEAL)

MEAL [Mobile Exchange Agri-produce Link] (with private sector), a multiuser subscription-based service. We collect food scraps and turn it into agricultural products/inputs to grow our own sustainable agriculture produce and deliver to our users at a discounted price. MEAL provides an ecological supply chain system which bridges the gap between production, consumption, and wastes.











Relationship & Value Proposition

Public and private

Contractual arrangement

Buy-back/discount

Food you can trust/Behavioral change

Data collection CO₂ sequestration

Climate adaptation



5 Key Objectives





Economic Sustainability/
Opportunities





Strengthen Women in Leadership





Chemical-Free Products



Sequester Carbon



Rekindle Community
Pride



Hydro-Meteorological Hazards

Derisking

Climate Smart Soil
Health & Policy

Food Waste

Investment Opportunities & Criteria

Reduced Food Loss

Water

Increased Farm Production

Increased Farm Security

Increased Farm Resilience

Reduced GHG

Increased Data

Safeguard Environment

Improved Livelihood

Reduced Input Cost

Reduced Nutrient Loss

Increased Farm Income



Barriers

Barriers:

- Weak capacity and ineffective mechanisms for sustained engagement of agriculture stakeholders
- Undeveloped and dispersed agri-environmental datasets and systems that limits eveidence-based decision making
- Policy and technology gaps, market and finance barriers that limits coordinated regional and sciencebased responses
- Lack of consolidated knowledge portal for sharing information
- Untapped potential to develop the competence of youth to contribute to building a climate resilent sector