Climate Risk Insurance and Adaptation in the Caribbean

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Framing: Big picture

- German Federal Ministry for the Environment (BMU) interest in the development of climate risk transfer approaches
- Assignment: Showcase how insurance can contribute to risk reduction and adaptation in SIDS context
- Support decision making process at UNFCCC ("SBI work programme on Loss & Damage") with insights from implementation
Objectives

- Provide financially stable parametric insurance solutions for low-income people to cover medium-level weather events (return period 20-40 years)
- Find ways to combine approaches with DRR to catalyse sustainable adaptation
- Prove value of regional entities in achieving these goals
- Exchange experience & lessons learned with policy makers
Climate Risk Adaptation and Insurance in the Caribbean

Partners: Research-Policy-Operational

- MCII at UNU-EHS: management, research, evaluation
- Caribbean Catastrophe Risk Insurance Facility
- Microensure
- Munich Re

Donor

- International Climate Initiative: Federal Ministry for the Environment, Germany
Climate Risk Insurance and Adaptation in the Caribbean:

Target Countries

Jamaica
St. Lucia
Grenada

Source: caribbean-online.com
Understand risk management needs of low-income people
• Fieldwork 2011

Assess the demand for risk transfer solutions by low-income people
• Demand study 2011

Design of tailored parametric insurance products
• Modelling & trigger design

Evaluation: Impact assessment of insurance products
• Market test in Jamaica
• Baseline survey
Understand risk management needs of low-income people

Fieldwork 2011 (Project Team)

- Qualitative Approach
- Focus Group Discussions with different stakeholder groups:
  - Low-income people (farmers, fishermen, day labourers)
  - Social Aggregators (credit unions, farmer associations, cooperatives, rural banks, etc.)
  - DRM organisations (CIMH, 5C’s, NGOs, etc.)
  - Insurance sector
  - Government (MoAg, MoF, MoT, MoD, etc.)
Assess the demand for risk transfer solutions

Demand Study 2011

- University of the West Indies, UNU-EHS, MCII
- Quantitative & qualitative approach
  - Expert interviews
  - 1059 HH surveys
- Assessment of DRM strategies of low-income people
- Demand for risk transfer solutions
- Indication on willingness to pay (premium)
- Distribution
Conclusion:

Including low-income people in the formal financial sector could reduce their vulnerability and support a reorientation to less stressful coping strategies.
Level of demand for insurance by country (in %)

Results:
Moderate demand: 33%
High to very high demand: 23%

Source: Lashley and Warner 2012
Design of tailored parametric insurance

Modelling & trigger design

- Wind speed + rainfall
- Data resolution vs. size of target countries
- Correlation analysis for wind speed & rainfall

2 Parametric products:

- Livelihood Protection Policy
- Loan Portfolio Cover
Livelihood Resilience in the face of disasters: Livelihood Protection Policy

- Parametric product: Trigger wind-speed & rain; product will be sold in tranches
- Beneficiaries: Individuals
- Effect: Product should provide liquidity to individuals in the aftermath of extreme weather event to protect livelihood

Financial resilience and loan default: Loan Portfolio Cover

- Parametric product: Trigger wind-speed & rain
- Beneficiaries: Banks or other loan provider with exposure to disaster related loan default
- Effect: Product should leverage lending to vulnerable people (e.g. agricultural sector)
Evaluation: Impact Assessment of Insurance Products

Market Test in Jamaica (ETH Zurich, UWI, MCII/UNU-EHS)

- 100 villages in two parishes selected
- To demonstrate take-up of insurance products
  - Show-case for Jamaica regulatory authority
- Currently being implemented in Portland and St. Thomas parishes
Evaluation: Impact Assessment of Insurance Products

Baseline Survey (ETH Zurich, UWI, UNU-EHS)

- What factors influence take-up of insurance products?
- How does the product influence people’s livelihood?
- How does the product influence the adoption of preventive measures?
- Quantitative approach: 1500 households (100 villages), HH interviews
- Randomisation
- Timeframe: late 2012 – 2014
Climate Risk Insurance and Adaptation in the Caribbean:

What’s Next

- Launching the LPP in St Lucia, Jamaica
- Embedding Climate Risk Insurance within national disaster management strategies
  - Model Parish concept
  - Agricultural Sector Development Plans
- Assessment of behavioural shifts
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