Exploring innovative climate risk management solutions in the Caribbean

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Introduction

- Caribbean is highly climate-exposed so provides a good starting point for testing and implementing innovative climate risk management (adaptation) solutions
- I will highlight in particular two initiatives currently under way in the region:
  - MCII/BMU insurance/adaptation project in which CCRIF is a key partner
  - MiCRO, a new public-private partnership implementing innovative catastrophe microinsurance solutions
Climate Risk Adaptation and Insurance in the Caribbean

- Project supported by German Environment Ministry (BMU) from their international climate fund (IKI) with MCII as executing agency
- CCRIF, MicroEnsure and Munich Re are operational partners
- Caribbean regional focus, multi-sectoral approach to protect vulnerable livelihoods
- Developed in response to enquiries from Parties to the UN-FCCC as to how insurance tools can be used to help protect those most vulnerable to weather risk in the developing world
Overall Aims

• The overall aims of the programme are to:
  – overcome barriers and catalyse solutions to address middle-level weather-related risks (return periods of 10-20 years) and facilitate public safety nets and public-private insurance solutions for vulnerable people;
  – find ways to link these insurance solutions to disaster risk reduction for catalytic adaptation benefits; and
  – demonstrate the value of a regional facility for achieving these aims.
Product Concepts

• We hope to be develop, test, and implement up to three products in the Caribbean. These might include:
  – a pure weather hedge (small scale farmers and day laborers);
  – weather index insurance facilitating access to credit (multi-cropping small scale farmers); and
  – lender-portfolio level insurance product working with microfinance/agricultural banks and other financial institutions that cater to low-income groups.

• Aiming to launch one or more products in some or all of Belize, Guyana, Jamaica, Grenada and Saint Lucia
Weather Securities

Front

This ticket will pay 100 Birr if the amount of rain that falls at Butajira weather station:

- from July 24th, 2001 to Hamle 24th, 2001
- is less than 100 mm

Weather Ticket

Back

This ticket would have paid in:
1965
1969
1974
1975
1987
1988
1992

Bar chart showing rainfall from 1995 to 2000.
Additional Aspects

• Linking insurance products to disaster risk reduction is key aspect of project
  – Link to early warning systems (e.g. RTFS)
  – Provide DRR advice
  – Reward DRR

• Act as a lighthouse project to demonstrate use of insurance instruments at micro-level, and link to regional risk pool (CCRIF)
MiCRO

- Public-private partnership delivering catastrophe insurance to Haiti’s micro-entrepreneurs
- Uses a hybrid risk transfer process to bring the efficiencies of parametric products (low per-risk cost and rapid payouts) while eliminating basis risk at the individual client level
- MiCRO offers a two-part, umbrella insurance programme for Fonkoze, the leading Haitian MFI, which then transfers the insurance benefits to its loan-holders
  - Parametric for wind, rain and earthquake
  - Basis risk coverage, subject to claims review, co-sharing and other mechanisms to align interests between insurer (MiCRO) and client (Fonkoze)
Fonkoze’s Insurance Model

- All of Fonkoze’s group-lending clients are covered by obligatory catastrophe insurance, which protects each client if their means of doing business is destroyed by a natural catastrophe event.
- When a rain, wind or earthquake event occurs, clients submit their claims through their Solidarity centers.
- Qualifying losses provide the following payout:
  - Reimbursement of the client’s existing Fonkoze loan balance
  - A 5,000 HTG (~US$125) cash payment
  - A new loan to recapitalise their business when the client is ready

Flowchart:
- Event occurs
- MiCRO calculates and makes parametric payout
- Fonkoze adjusts claims by clients
- Beneficiary receives payout
- MiCRO provides basis risk payout (if applicable)

Total Time: 2-3 Weeks
Case Study

- Extremely heavy rainfall in south-western Haiti led to a $1.05 million parametric payout.
- Nearly 3,900 Fonkoze clients received benefits to recover their businesses, repair damaged houses and replace assets.
Damage examples