Synergies between National Climate Risk Management and Regional Risk Insurance Pools

Dr Koko Warner
5 December 2014
Lima
What gets in the way...climate risks
<table>
<thead>
<tr>
<th>Stressor</th>
<th>Grenada (%)</th>
<th>St. Lucia (%)</th>
<th>Jamaica (%)</th>
<th>Belize (%)</th>
<th>Stressor Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance Payout</td>
<td>4.8</td>
<td>1.5</td>
<td>2.9</td>
<td>8.6</td>
<td>Low</td>
</tr>
<tr>
<td>Used Savings</td>
<td>45.7</td>
<td>96.2</td>
<td>65.4</td>
<td>34.5</td>
<td>Medium</td>
</tr>
<tr>
<td>Used Remittances</td>
<td>3.8</td>
<td>3.1</td>
<td>9.6</td>
<td>1.7</td>
<td>Medium*</td>
</tr>
<tr>
<td>Found another job</td>
<td>10.5</td>
<td>6.1</td>
<td>0.0</td>
<td>12.1</td>
<td>Medium</td>
</tr>
<tr>
<td>Sold possessions</td>
<td>1.9</td>
<td>1.5</td>
<td>0.0</td>
<td>13.8</td>
<td>High</td>
</tr>
<tr>
<td>Government Assistance</td>
<td>34.3</td>
<td>8.4</td>
<td>1.9</td>
<td>25.9</td>
<td>Medium*</td>
</tr>
<tr>
<td>Borrowed (informal)</td>
<td>7.6</td>
<td>10.7</td>
<td>16.3</td>
<td>13.8</td>
<td>Medium</td>
</tr>
<tr>
<td>Borrowed (formal)</td>
<td>7.6</td>
<td>10.7</td>
<td>0.0</td>
<td>36.2</td>
<td>Medium</td>
</tr>
<tr>
<td>Did not repair/replace</td>
<td>22.9</td>
<td>59.5</td>
<td>48.1</td>
<td>24.1</td>
<td>?High?*</td>
</tr>
<tr>
<td>Other (includes ‘waiting’)</td>
<td>9.5</td>
<td>0.8</td>
<td>51.9</td>
<td>6.9</td>
<td>?High?*</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>148.6</strong></td>
<td><strong>198.5</strong></td>
<td><strong>196.1</strong></td>
<td><strong>177.6</strong></td>
<td>-</td>
</tr>
</tbody>
</table>

*Indicates that stressor level was not included in Sebstad et al. (2006) but inferred from other levels.

*Totals do not sum to 100% as multiple responses were allowed. High amounts over 100% indicates multiple coping strategies.*

Stressor Levels from Sebstad et al. (2006).
Managing climatic risks from the “middle layer” —
regional risk platforms & insurance pools
Managing climatic risks from the “middle layer”
regional risk platforms & insurance pools
Next steps: Use regionally-owned & driven platforms to enhance country adaptation plans & implementation

- Work with regional risk management platforms like ARC, CCRIF, PCRAFI...

- Enhance ability of countries to absorb climate finance, risk management and transfer payouts

- Enhance the ability of local markets to provide risk management services, especially to underserved people and institutions that serve them
Level of demand for insurance by country (in %)

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

Source: Lashley and Warner 2012
Coping Strategies and their Impacts

<table>
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<td>Did not repair/replace (%)</td>
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<td>22.9</td>
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</table>
- Coping strategies often lead vulnerable populations **deeper into poverty**
- Over the last 30 years **1.5 million affectees** of extreme weather events in the eastern Caribbean
- In Grenada, **100%** of the national population is exposed to the threats posed by extreme weather events
- Total economic damage amounted to **USD 800 million** caused by one extreme weather in 2004
- Negative impacts on **economic growth** and **productivity**

**Poverty and social vulnerability are intertwined!**
Climate Risk Adaptation and Insurance in the Caribbean

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

Donor
- International Climate Initiative of the German Federal Ministry for the Environment, Nature Conservation, Nuclear Safety (BMU)
Our Goals

- Parametric weather index insurance solutions for low-income people
- Extend the financial safety net to previously excluded persons
- Find ways to catalyse sustainable adaptation to climate change
Target Countries

- Jamaica
- St. Lucia
- Grenada

Source: caribbean-on-line.com
Demand Study 2011

1. What coping strategies did low-income populations employ?
2. Was there a demand for risk transfer solutions?
3. Were they willing to pay?
4. How will the solutions be distributed?
Risk Transfer Solutions for Loss and Damage

Livelihood Protection Policy
 Parametric product: Dual peril - wind-speed, rain
 Beneficiaries: Individuals
 Beneficiaries determine the level of coverage they require - product sold in units
 Effect: Provides liquidity to individuals in the aftermath of extreme weather events to protect livelihoods

Livelihood Resilience

Financial Resilience
 Protects individuals against weather extremes, climate shocks
 Provides recourse to coping strategies that could lead to poverty
 Improves access to credit, leading to financial stability in the long run
 Encourages behaviour shift from risk neutral to risk aware
Why is it important for agriculture?

- Increasing resilience of farmers against weather extremes, climate shocks reduces food insecurity, crop losses
- Accumulated losses from small scale, highly frequent, localized disasters undermine local development and competitiveness
- Improve access to credit, financial stability
- Encourage risk aware behaviour
Weather Index Insurance: How it works

- Spatial Resolution of the target country
- Wind speed and Rainfall
- Correlation analysis for wind, rain

Trigger and payout structure of the Livelihood Protection Policy
Antoine’s story

HOW LPP COULD HAVE HELPED ANTOINE

 **Before the hurricane** Antoine receives an SMS warning of an approaching hurricane. He secures his property and leads his family to a safe location.

 **Immediately after** As he was able to secure his property only one greenhouse is lost. The hurricane exceeded the rainfall/wind speed threshold, so Antoine gets an SMS telling him he will receive a payout within 30 days.

 **Medium-term** With the payout deposited in his bank account Antoine can repay his loan and start rebuilding his livelihood without resorting to more desperate coping measures.

 **Long-term** Antoine is able to both repay his loan and rebuild the lost greenhouses with the payout he receives from his policy. This puts him and his family in a better position for when another hurricane inevitably strikes.
Thank you!

“I had full confidence in the product and EC Global Insurance. I think it is very important to have some form of insurance as a honey producer, given the current climatic conditions we face. During the trough we experienced a high level of rainfall. I received the SMS notification of the trigger and the payment was received in the time promised. I am extremely happy that there is a payout and it is assisting”.

Walter Edwin
St Lucia Honey Producers’ Association