

# Index Insurance for Climate Risk Management and Poverty Reduction

Climate change and persistent underdevelopment are global challenges. The Global Humanitarian Forum calls us “to catalyze action to meet the urgent needs of vulnerable communities exposed to climate risks,” reflecting a growing demand for new and innovative approaches to managing climate risk. The next issue of *Climate and Society* will examine the use of index insurance (see box on next page) to help reduce vulnerability and poverty and adapt to climate change. Experience to-date has been limited to individual case studies, which show promise of lessening the impacts of climate shocks and enabling investment and growth in the agriculture sector. But these case studies have also uncovered significant questions that must be answered in order to start implementing index insurance at a scale relevant to attaining meaningful development impacts.

## Climate, Poverty and Development

Climate variability and extremes are very much a part of life. Where people are poor and vulnerable, these factors can add greatly to the hardship. If crops fail, farmers may have few or no alternative means to provide food for their families. Natural disasters such as floods can overwhelm a rural household, depleting or destroying its capital and diminishing its resilience. The negative impacts of climate can keep people in persistent poverty, in the form of diminished productive capacity and weakened livelihoods. Impacts at the household level aggregate and multiply into impacts on the national economy. In a warmer future climate, there is an increased risk of more intense and frequent extreme events. Human population is expected to rise 50% by mid-century, placing further pressures and demands on agricultural systems.



A farmers' association in Malawi. D.Osgood/IRI

**Innovations in managing and transferring climate risk are needed to increase the resilience of vulnerable populations—helping them to cope with the unavoidable impacts of climate change.**

## Index Insurance in Practice

*Climate and Society* No. 2 will take a fresh look at the effectiveness of index insurance for reducing poverty and better managing climate risk. Case studies and pilot programs show that index insurance can effectively target a range of critical climate/poverty issues – from national-level

food insecurity response to farm-level credit availability. These projects show great promise. They also have uncovered significant questions, that, if ignored during implementation, could lead to failure and even increase overall vulnerability. *Climate and Society No. 2* will capture these questions, examining current case studies, relying on expert scientific opinion to delineate the advances, opportunities, pitfalls and limitations faced in scaling up index insurance. In particular, the following questions will be examined:

- » How should index insurance be targeted to have the greatest impact on poverty?
- » What are the hurdles to scale-up, and how can they be managed? Can climate science and information help overcome hurdles associated with climate change and basis risk?
- » What are the roles of governments, NGOs and donors in scaling up index insurance for poverty reduction?

### **Climate and Society Publication: It's a Process!**

Each issue of *Climate and Society* centers on a specific, timely, climate-related development problem. It captures state-of-the-art practice in a policy-relevant language. The publication evolves from discussion with partners and practitioners, writing and review by leading authorities, and synthesis from a broad range of relevant fields. The process is designed to capture and lay out the current state of knowledge about the problem and identify key practical challenges and opportunities. *Climate and Society No. 2* will build on high-level roundtable discussions attended by public- and private-sector leaders engaged or interested in index insurance. It will also build on the ideas and expertise of researchers and practitioners presented during targeted workshops designed to focus on a particular question. *Climate and Society No.1* was the result of a partnership among IRI, the Africa Union, UN- Economic Commission for Africa, the African Development Bank and the Global Climate Observing System. It was supported by the U.K. Department for International Development and U.S. National Oceanic and Atmospheric Administration in response to the G8 Gleneagles Summit focus on climate and sustainable development in Africa. The report was released at the Africa Union Heads of State Summit in 2007 during a special session on Climate and Technology.

### **What is weather index insurance?**

Weather index insurance is one of a number of index-based financial risk transfer products that have the potential to help protect people and livelihoods against climate shocks and climate risk. It is insurance that is linked to a weather index such as rainfall, rather than a possible consequence of weather, such as crop failure. This subtle distinction resolves a number of fundamental problems that make traditional insurance unworkable in rural parts of developing countries. Unlike traditional crop insurance against crop failure, the insurance company does not need to visit farmers' fields to determine premiums or to assess damages (reducing so-called transaction costs). Instead the insurance is designed around rainfall data for example. If the rainfall amount is below the earlier agreed-upon threshold, the insurance pays out. This process also removes the 'perverse incentives' of crop insurance, where farmers may actually prefer their crops to fail so that they receive a payout. With index insurance, the payout is not linked to the crop survival or failure, so the farmer has the incentive to make the best decisions for crop survival.