Climate Risk Insurance for Poverty Reduction and Development

There is a growing demand for new and innovative approaches to managing climate risk, to help reduce poverty and meet the challenges of climate change. Index insurance is one promising approach for both lessening the impacts of climate shocks and enabling investment and growth in the agriculture sector. Experience to-date has been limited to individual case studies which, despite promise, 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. The next issue of Climate and Society will critically examine the use of index insurance, uncovering the challenges and opportunities to meeting the development challenges at scale.

Climate, Poverty and Development

Climate variability and extremes are 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 assets 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. In addition, human population is expected to rise 50% by mid-century, placing further pressures and demands on agricultural and other systems.

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. Some of these challenges can partially be overcome through the use of innovative science and technologies, such as remote sensing and advanced techniques, to quantify uncertainties in climate and...
weather information. Other challenges, such as developing markets, trust and institutional capacity, require sustained effort, time and experience. Climate and Society will capture these questions, examining current case studies, relying on expert scientific and practitioner opinion to delineate the advances, opportunities, pitfalls and limitations faced in scaling up index insurance.

**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. *Climate and Society No. 2* captures knowledge and experiences from a series of workshops hosted by partners, as well as a high-level roundtable discussion held at the Global Humanitarian Forum. These events bring together public- and private sector leaders, researchers and practitioners, promoting lively discussion and interaction between stakeholders on the opportunities and challenges of meeting development needs through index insurance.

*Climate and Society No. 1* was the result of a partnership between the Africa Union, UN- Economic Commission for Africa and the African Development Bank. It was supported by the UK government’s DFID and US-NOAA in response to the G8 Gleneagles Summit focus on climate and sustainable development in Africa. It was released at the Africa Union Heads of State Summit in 2007 during a special session on Climate and Technology.

**Climate and Society: A Partnership for Knowledge Management and Sharing**

*Climate and Society No. 2* is the result of a collaborative effort amongst the following partnering institutions: International Fund for Agricultural Development, the International Research Institute for Climate and Society, Oxfam America, Swiss Reinsurance, the US National Oceanic and Atmospheric Administration, the United Nations Development Program, the World Bank Commodity Risk Management Group, and the World Food Programme.

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.

For more information on this process visit: [http://www.iri.columbia.edu/climateandsociety](http://www.iri.columbia.edu/climateandsociety)