Insurance for Development

Climate Change: An overview on the Peruvian experience

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On behalf of





of the Federal Republic of Germany

The history of development of El Niño Insurance In



Dr. Jerry Skees, President of GlobalAgRisk, has led the development of the El Niño Insurance in Peru with support from several donors

2004-2007 USAID 2009-2012 Bill and Melinda Gates Foundation 2009-2011 UNDP 2010-Current GIZ

The support of all donors in these processes has been essential and it gratefully acknowledged.

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Themes



- Climate Change will have a greater impact on developing countries than on developed countries
- Many innovations in insurance and risk financing are underway in developing countries
- Getting to the 'big risk' with parametric or index insurance via sovereign risk projects or projects like the Extreme El Niño Insurance can lay a strong foundation for efforts that follow
- Insurance is only part of the solution savings and contingent credit must also be used





Loss and damage estimation implies assessment and modeling on hazards and assets



Hazard Asset



Image taken from The Cost of Climate Change. Katie McCray / April 20, 2011 bpr.berkeley.edu





Domain of Risk Financing for Extreme Climate Risk in Developing Economies



Who is Vulnerable?	Sample Instruments	Sample of Innovative Projects
Governments National Regional Communities	Reserve Funds CAT Bonds Weather Derivatives Index Insurance	Mexican FONDEN Caribbean Cat Risk Insurance Facility (CCRIF – World Bank) Pacific / Africa Food Security El Niño Insurance (GIZ)
Households Especially the Poor	Traditional Insurance Index Insurance	Malawi / Haiti Fonkoze / Ethiopia HARITA/ Mongolia IBLIP / Kenya / Indonesia
Private Companies Agriculture, Energy, Transport	Traditional Insurance Index Insurance	Peru Extreme El Niño Insurance Private weather derivatives (BMGF, GIZ)
Financial Institutions MFIs, Banks, Insurance Companies	Traditional Insurance Index Insurance Reinsurance	Peru Extreme El Niño Insurance Philippines Tropical Storm (GIZ) Ghana Index Insurance (GIZ)





Peru as an example of state-of-the-art techniques in risk management for El Niño



- The strategy implemented merges three fundamental components of risk management:
 - State-of-the-art methodologies in hazard modeling (<u>El</u> <u>Niño</u>),
 - 2. Structuring of innovative financial instruments (<u>index</u> <u>insurance</u>) and
 - Identifying strategies based on a value-chain approach (<u>domino effect</u>).



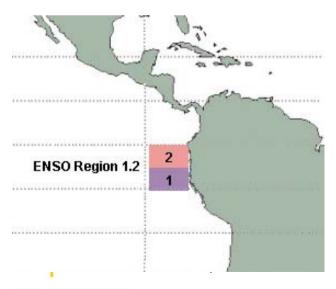




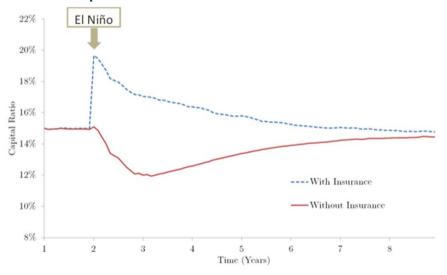
El Niño insurance pays before flooding starts: a success case in MFIs



- The insurance was developed on a public index periodically released by NOAA taking average sea-surface temperature for November and December
 - —El Niño Insurance pays in January before significant flooding starts in February
 - Improves opportunities for loss mitigation
 - An example of good practice in risk management involved a MFI purchasing the El Niño insurance to protect their portfolio. This allows them to:
 - -Reduce financial vulnerability to El Niño
 - —Increase their lending to clients in the Northern Regions of Peru
 - —Fundamentally, the intent is to improve financial inclusiveness. The MFI did not pass the cost onto borrowers



Example from Peru: El Niño stress test



Value-Chain approach on micro financial institutions: triggering a domino effect to small farmers



- It is well documented in the literature "<u>Access to formal credit can enhance rural economic development</u>"
- However, El Niño risk limits access to credit
 - Risky sectors (agriculture, fishing, etc.)
 - Risky regions
- Considering MFI buys insurance to cover *its* risk
 - Talking to the MFIs
 - Analyzing monthly data (1994-2008) available from Peruvian regulator

GlobalAgRisk Strategy

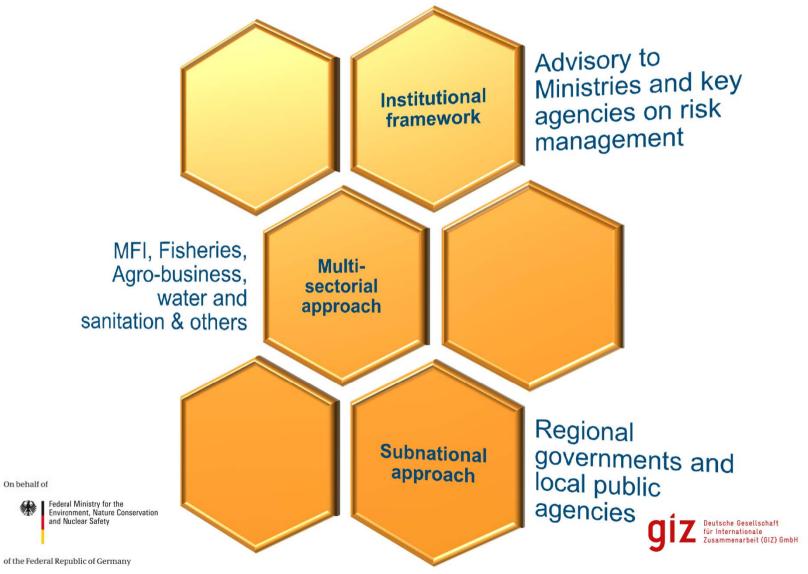






A comprehensive strategy: Institutional and multisectorial approach on Peru





Agenda of activities currently developed at Peru: some remarks



- Multisectorial approach
 - Currently is under implementation a strong marketing promotion of El Niño Insurance over potential insurance companies (offer side) and potential buyers (demand side) about El Niño Insurance.
 - It has tailored El Niño Insurance for each kind of sector involved in the marketing strategy.
- Institutional framework
 - A roadmap (implementation strategy) was developed & delivered for the Ministry of Finance, contributing to the national risk financing strategy against natural hazards.
 - It is implementing an advisory on risk financing for the national authority of water and sanitation sector.
- Subnational approach
 - It has started to develop subnational strategies for regional governments on catastrophe risk financing.
 - It is developing strategies for local water & sanitation companies on risk management.
 - The strategy includes those regions severally affected for the last El Niño (1982 & 1997)

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