Time for action in developing countries

How Insurance can serve the poor
COP 12 UNFCCC climate talk

Thomas Loster
Munich Re Foundation
From Knowledge to Action

November 2006
The Munich Re Foundation
Focus „humans at risk“

Humans at risk

Environmental and climate change

Water: Resource and risk factor

Disaster prevention

Population development

Urbanisation and megacities

Poverty
• New insurance related systems are necessary to get these countries, where currently almost no insurance is available, out of the global warming trap

• MCII intends to provide expertise on insurance solutions for losses due to climate change especially in developing countries
Overview

Target Group
Costs of Implementation
Success story
Lessons learned
Next steps
Concluding remarks
Great Weather Disasters 1950 – 2005
Economic and insured losses
(as at March 28, 2006)
Hurricane Katrina Losses
US$ 125,000,000,000 covered US$ 65,000,000,000
Floods India

EL : 5,000m US$
IL: 770m US$
Killed >1,000
## Weather Disasters January – October 2006

Comparison World versus Africa

<table>
<thead>
<tr>
<th></th>
<th>World</th>
<th>Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of events:</td>
<td>620</td>
<td>55</td>
</tr>
<tr>
<td>Fatalities:</td>
<td>10,000</td>
<td>1,300</td>
</tr>
<tr>
<td>Overall losses:</td>
<td>31,000</td>
<td>60</td>
</tr>
</tbody>
</table>

US$m as at November 2006; * losses in original values

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Source: Munich Re NatCatSERVICE®
### Deadliest drought disasters in Africa 1970 – 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Country</th>
<th>Fatalities</th>
<th>Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973 - 1974</td>
<td>Ethiopia, Somalia</td>
<td>300,000</td>
<td>4,000,000</td>
</tr>
<tr>
<td>1981 - 1984</td>
<td>Chad</td>
<td>3,000</td>
<td>1,500,000</td>
</tr>
<tr>
<td>1983</td>
<td>Swaziland</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>1984</td>
<td>Ethiopia</td>
<td>300,000</td>
<td>7,000,000</td>
</tr>
<tr>
<td>1984</td>
<td>Sudan</td>
<td>150,000</td>
<td>8,000,000</td>
</tr>
<tr>
<td>1984 - 1985</td>
<td>Mozambique</td>
<td>100,000</td>
<td>2,000,000</td>
</tr>
<tr>
<td>1987</td>
<td>Somalia</td>
<td>600</td>
<td>500,000</td>
</tr>
<tr>
<td>2002</td>
<td>Malawi</td>
<td>500</td>
<td>3,000,000</td>
</tr>
</tbody>
</table>

As at November 2006
People affected by natural disasters in Africa

Millions affected per decade

Drought

Flood

Coping with drought risk is of paramount importance!

http://www.wernergut.de
Global distribution of insurance premiums per capita

Property insurance premium (non-life including health) per capita per year

The inadequately insured
- No data available
- US$ 1-25

The basically insured
- US$ 26-50

The well insured
- US$ 51-100
- US$ 101-500
- US$ 501-1,000
- US$ 1,000+

2006 Geo Risks Research, Munich Re

Source: Peter Höppe, Geo Risks Research Department, Munich Re
La Conférence des Nations Unies sur le changement climatiques
### Micro-, Meso-, Macro Products

**Different impacts, scales and solutions**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Product Type</th>
<th>Focus</th>
<th>Sub-focus</th>
<th>Availability</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Micro-scale</strong></td>
<td>Micro-insurance</td>
<td>health, Life (funeral): yes</td>
<td>very active small worlds</td>
<td>yes</td>
<td>property (home, plough, boat): ?</td>
</tr>
<tr>
<td><strong>Meso-scale</strong></td>
<td>Derivatives and Index Insurance</td>
<td>weather, drought: yes</td>
<td>much in the developed world</td>
<td>yes</td>
<td>1st Index in Ethiopia, more to come</td>
</tr>
<tr>
<td><strong>Macro-scale</strong></td>
<td>Cat Bonds</td>
<td>storms, floods, droughts etc.: yes</td>
<td>only in the developed world</td>
<td>yes</td>
<td>extremely complex</td>
</tr>
</tbody>
</table>

**Other**

**Climate Funds**
are global agreements possible?
The reality

Two promising ways forward…

The Indian Example
The African Example
Example India

The Basix Farmers Insurance
Risks Covered by Insurance Cos with BASIX facilitation

Risks to Life
- Death
- Disease
- Disability

Risks to Crops

Risks to Livestock

Risks to Enterprises

Courtesy: Gunaranjan, Manager-Insurance Business, BASIX
How does it do?

BASIX Branch Operations

FX-Field Executive
LSA-Livelihood Service Advisor

FX1
FX 2
FX 3

LSA 1
LSA 2
LSA 3
LSA 1
LSA 2
LSA 3
LSA 1
LSA 2
LSA 3

15 to 20 villages
15 to 20 villages
15 to 20 villages
15 to 20 villages
15 to 20 villages
15 to 20 villages
15 to 20 villages
15 to 20 villages
15 to 20 villages

Courtesy: Gunaranjan, BASIX

LSA travels to village

Interacts, assesses and provides...

Credit

Rs.6.3 billion disbursed, 98.3% OnTime Recovery Rate

Insurance

Agri-Service

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Example Africa

The Ethiopia Drought Insurance Scheme
To calibrate your eye, a 20 kilometer radius around a set of accredited meteorological stations… (~1250 square km)

Here, a 50 kilometer area (~7850 square km)

Source: John D. Corbett, Mud Springs Geographers, 13 November 2006
From meteorological stations (e.g., Chitedze) to daily weather ‘surfaces’

= space / time capacity that is location specific

Source: John D. Corbett, Mud Springs Geographers, 13 November 2006
The world's largest humanitarian agency

Each year, they give food to an average of

90 million poor people to meet nutritional needs, 61 million hungry children thereof in at least 80 of the world's poorest countries
Ethiopia Drought Insurance
“World's first humanitarian insurance policy”

- **Construction**: Derivative based, calibrated index of rainfall data, 26 weather stations
- **Trigger**: Rainfall from March-October 2006 significantly below historic averages (crop failure)
- **Cover**: US $7 m (potential losses 17m farmers)
- **Premium**: US$ 970m
- **Insurer**: AXA/ AXA Re
- **Inured**: Farmers in Ethiopia/UN-WFP
- **Consultant**: Risk Management Solutions
Lessons learned
Different People – Different Worlds – Different Challenges

Government
Community Head

Farmer
Individual

Insurance Agent
Insurance Manager

Ownership at all levels!
Insurance Solutions for the poor
What is needed?

Insurers
- stable partners
- stable clear regulatory framework
- geographical spread (diversify)
- long-term business (payback)
- volume

Affected/Poor/Donors/FoodPrgs/Governments
- defining needs
- understanding insurance principles
- will for pre versus post activities

Both
More PPP and sustained dialogue!
**The Solution**
Creating stable Task Forces such as UNEP FI

- All players
- Champions
  i.e. real decision makers with mandate
- Fixed Time Frames
- Market potential assessment from insiders
The Munich Re Foundation
Providing a Platform for Micro-Insurance Solutions


Microinsurance Conference 2006
Microinsurances against poverty: The need is great, but these tools have so far been accessible only to a small number of people. From 21 to 23 November 2006, the Microinsurance Conference 2006 will take place in Cape Town, South Africa. The Conference is jointly hosted by CGAP (Consultative Group to Assist the Poor) Working Group on Microinsurance and the Munich Re Foundation with the support of Finmark Trust. More

Microinsurance Conference 2005
From 18 to 20 October 2005, the Munich Re Foundation held the 2005 Microinsurance Conference “Making Insurance Work for the Poor: Current Practices and Lessons Learnt”. In cooperation with the CGAP (Consultative Group to Assist the Poor) Working Group on Microinsurance, around a hundred selected experts from international organisations, non-government organisations, development-aid organisations and the insurance industry discussed experiences and challenges of insuring people with low incomes. More
Thank you

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