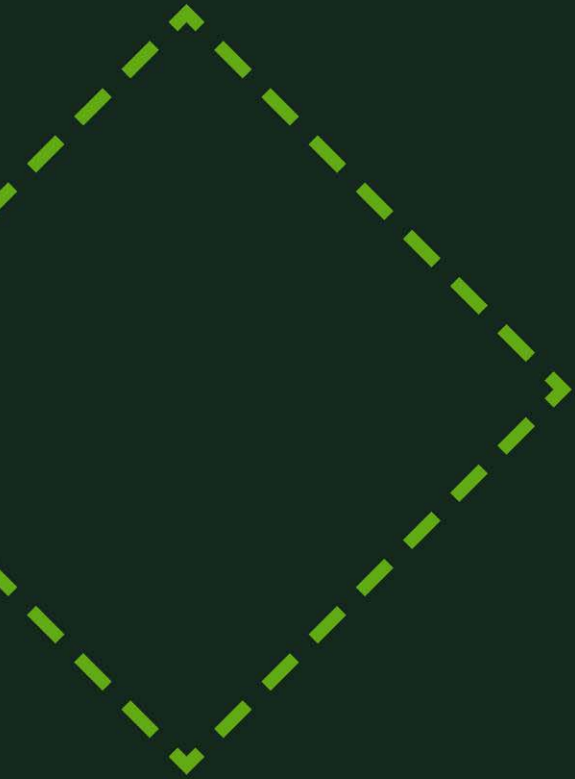


Time for action in developing countries

How Insurance
can serve the poor

COP 12 UNFCCC climate talk



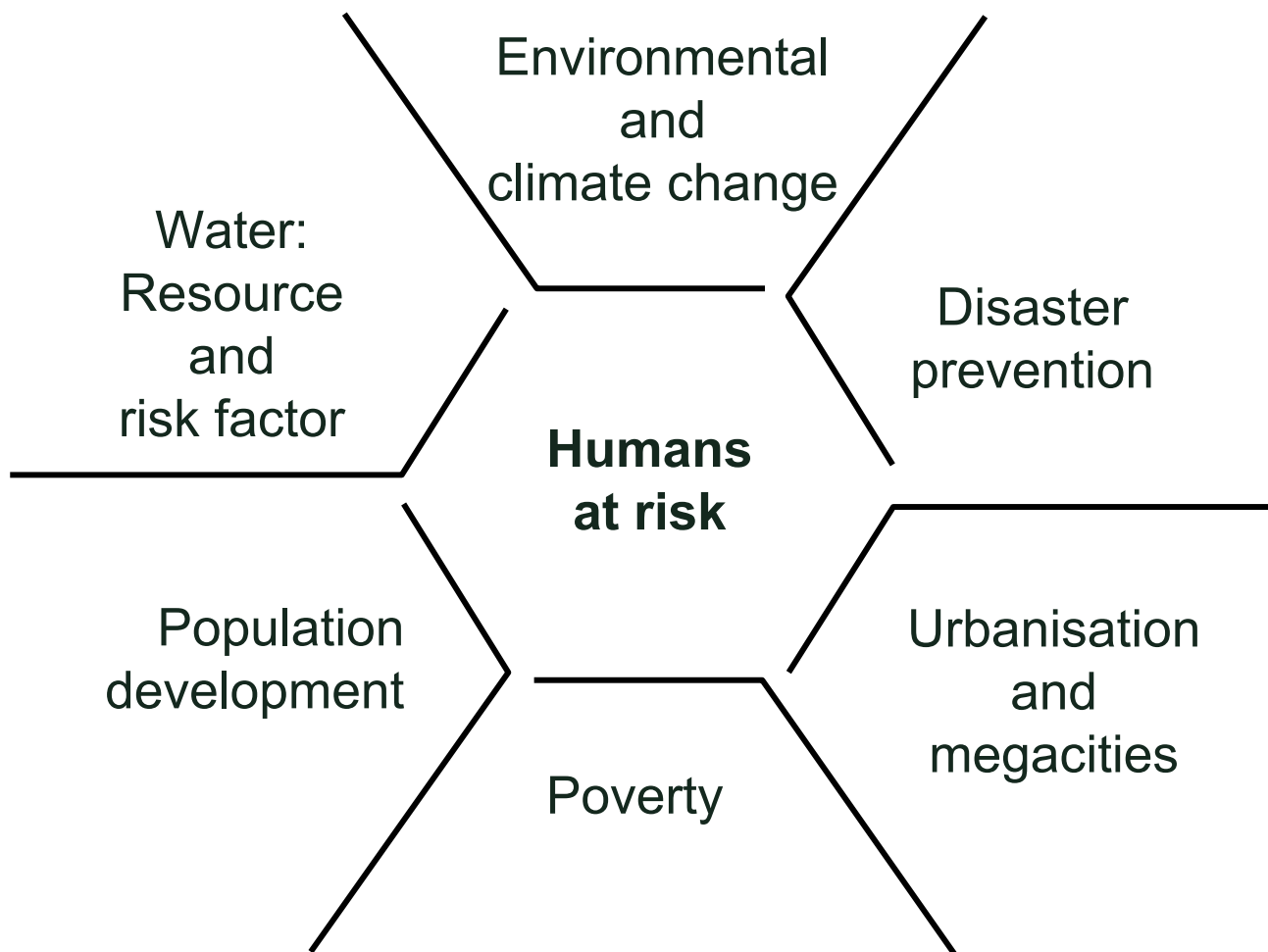
Thomas Loster

**Munich Re
Foundation**

From Knowledge
to Action

The Munich Re Foundation

Focus „humans at risk“



- **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

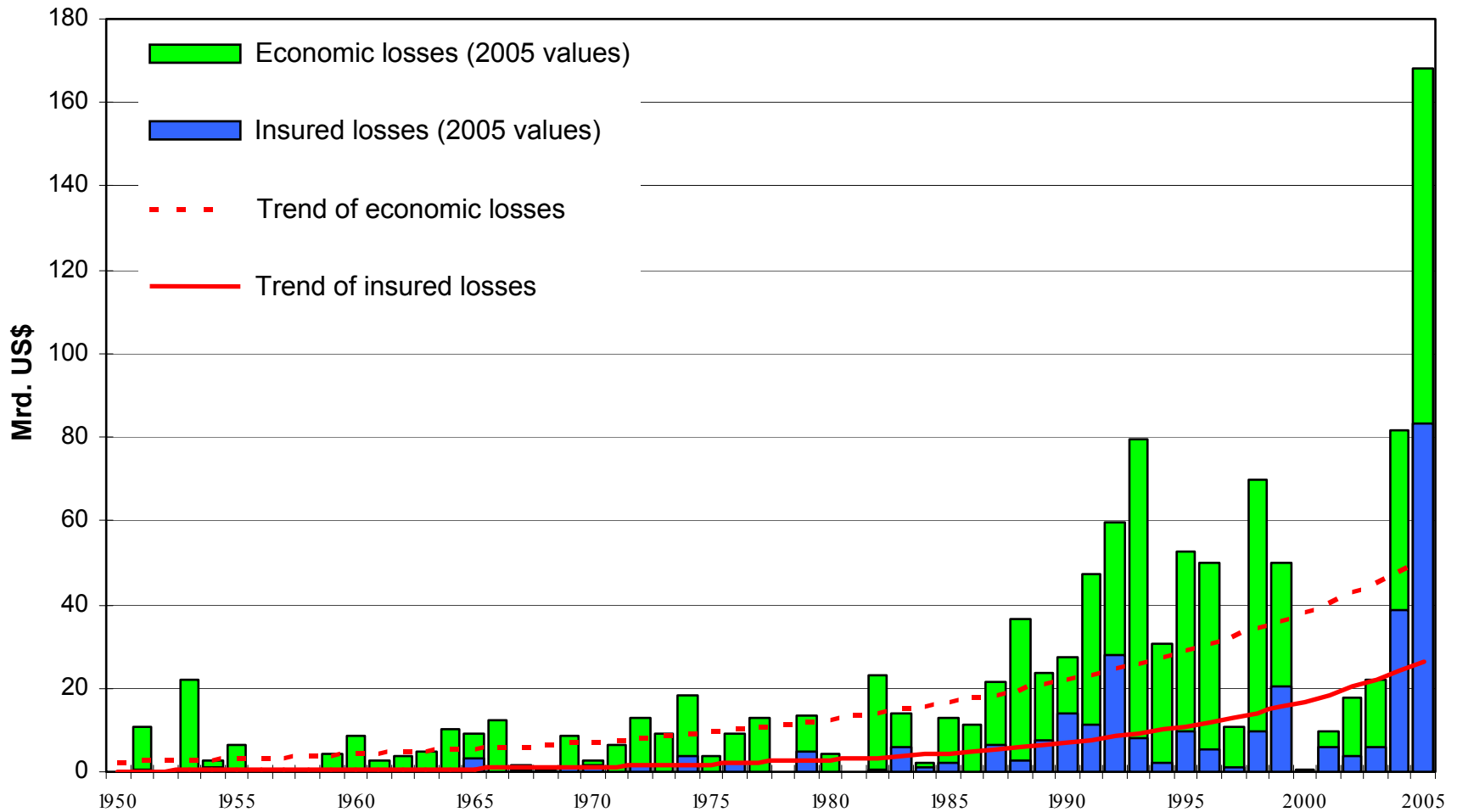
Lessons learned

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

24. July – 5 August 2005 – record rain in Mumbai



Weather Disasters January – October 2006 Comparison World versus Africa

	World	Africa
Number of events:	620	55
Fatalities:	10,000	1,300
Overall losses:	31,000	60

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

© 2006 NatCatSERVICE®, Geo Risks Research, Munich Re

Source: Munich Re NatCatSERVICE®

Deadliest drought disasters in Africa 1970 – 2005

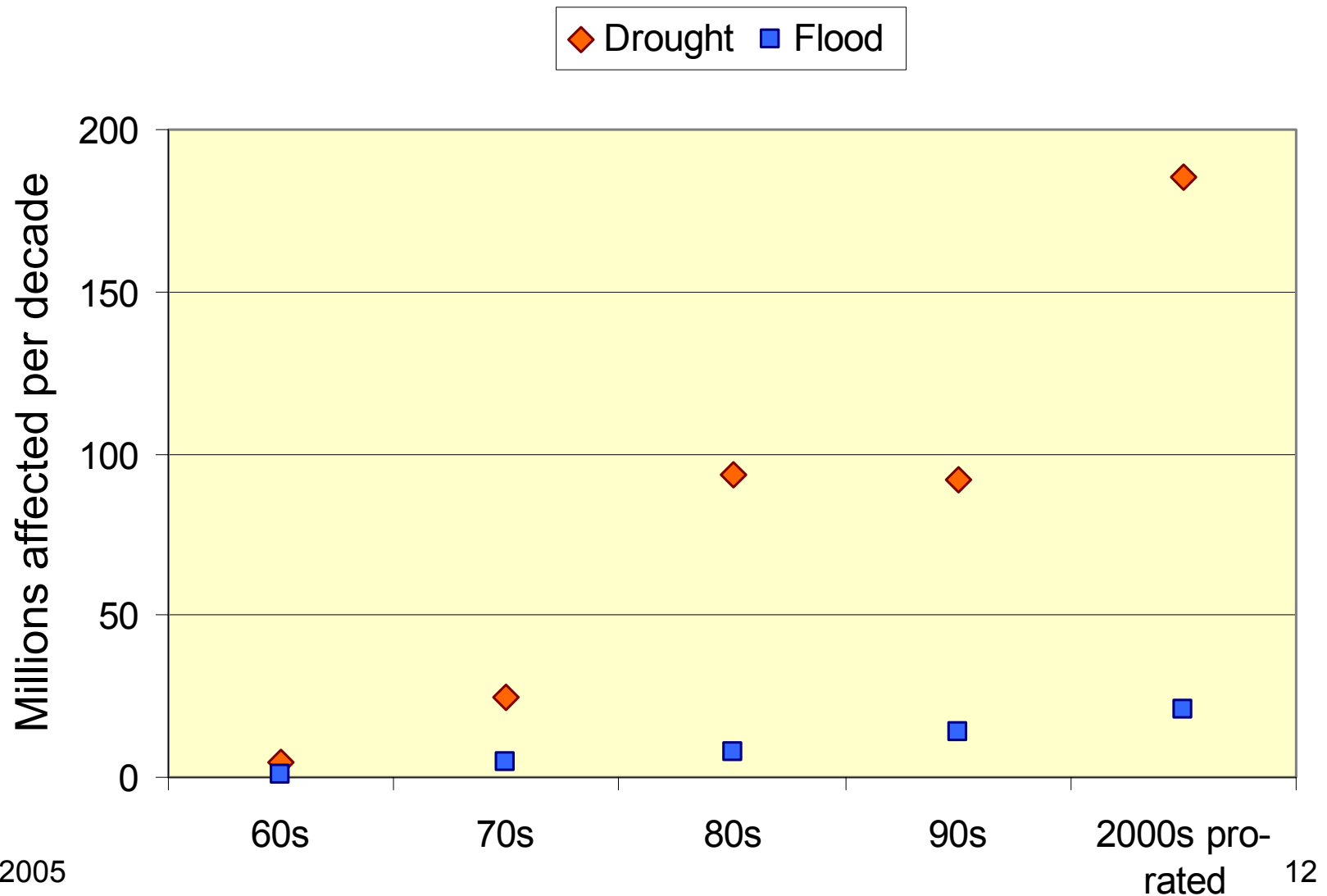
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Year	Country	Fatalities	Affected
1973 - 1974	Ethiopia , Somalia	300,000	4,000,000
1981 - 1984	Chad	3,000	1,500,000
1983	Swaziland	500	
1984	Ethiopia	300,000	7,000,000
1984	Sudan	150,000	8,000,000
1984 - 1985	Mozambique	100,000	2,000,000
1987	Somalia	600	500,000
2002	Malawi	500	3,000,000





People affected by natural disasters in Africa



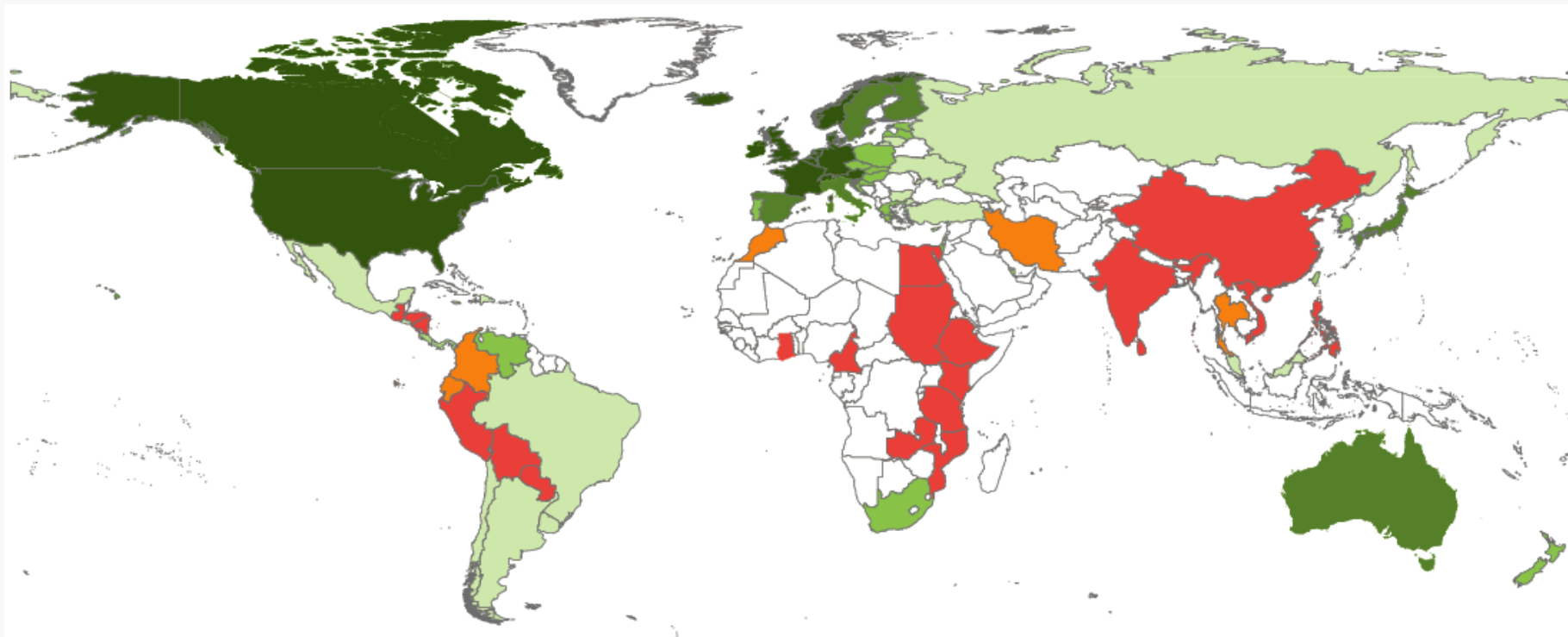
May 2005

Source: Ian Noble, The World Bank, November 2006

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



La Conférence
des Nations Unies sur le
changement
climatiques



BERD

OPAEP

ACM

OMENIST

Micro-, Meso-, Macro Products

Different impacts, scales and solutions

Micro-scale focus

Micro-insurance

health, Life (funeral): yes
very active small worlds
property (home, plough, boat): ?

Meso-scale focus

Derivatives and Index Insurance

weather, drought: yes
much in the developed world
1st Index in Ethiopia, more to come

Macro-scale focus

Cat Bonds

storms, floods, droughts etc.: yes
only in the developed world
extremely complex

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 Livestock



Risks to Crops



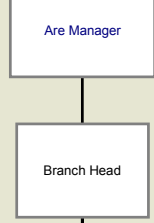
Risks to Enterprises



Courtesy: Gunaranjan, Manager-Insurance Business, BASIX

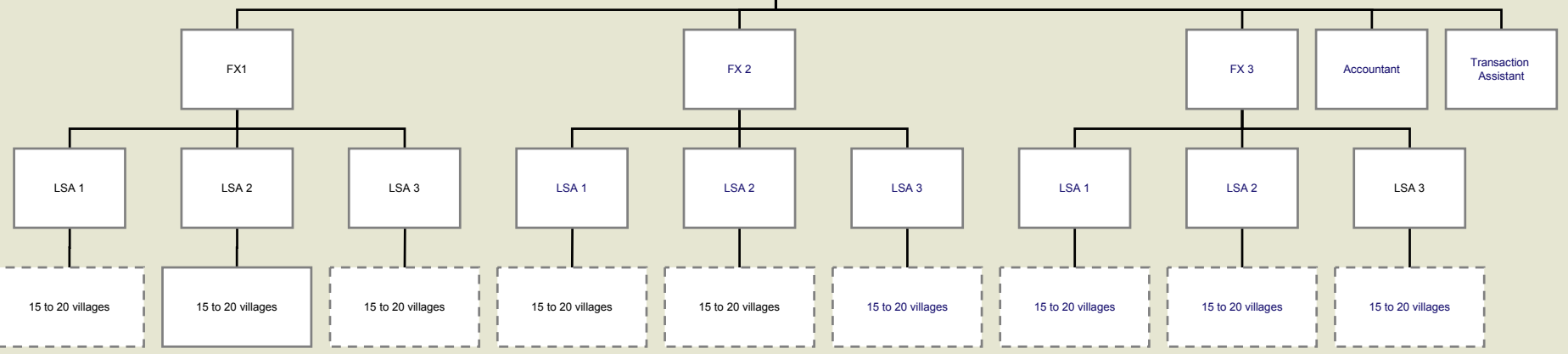
How does it do?

BASIX Branch Operations



FX-Field Executive

LSA-Livelihood Service Advisor



Courtesy: Gunaranjan, BASIX



LSA travels to village



Interacts, assesses and provides...



Credit



Insurance



Agri-Service



Munich Re Foundation

Thomas Loster

Rs.6.3billion disbursed,
98.3% OnTimeRecoveryRate

Example Africa

The Ethiopia Drought Insurance Scheme

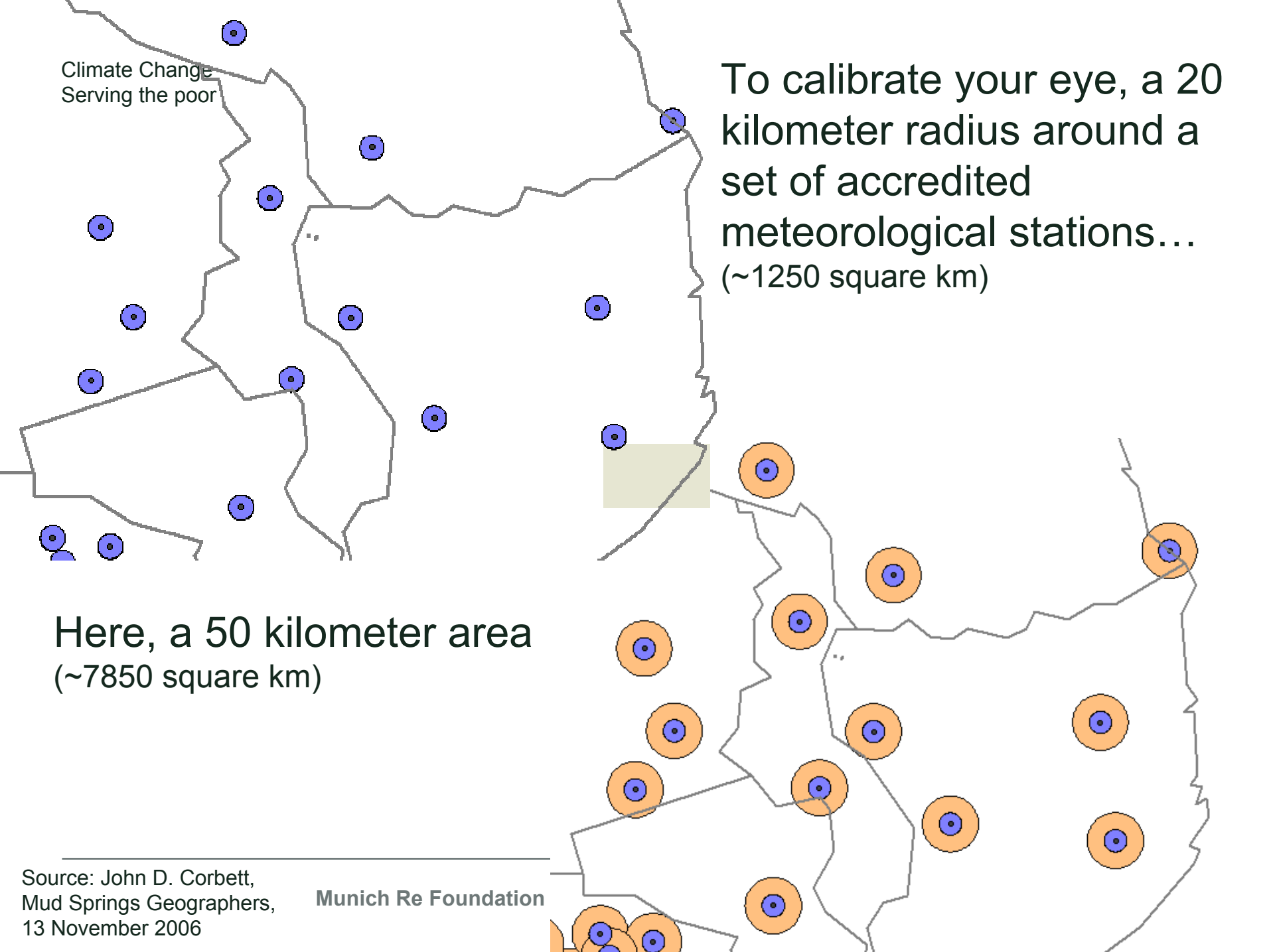
Climate Change
Serving the poor

To calibrate your eye, a 20
kilometer radius around a
set of accredited
meteorological stations...
(~1250 square km)

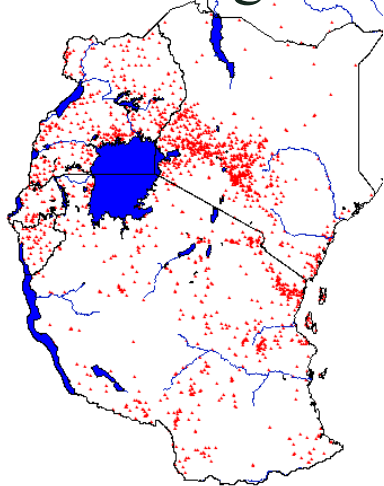
Here, a 50 kilometer area
(~7850 square km)

Source: John D. Corbett,
Mud Springs Geographers,
13 November 2006

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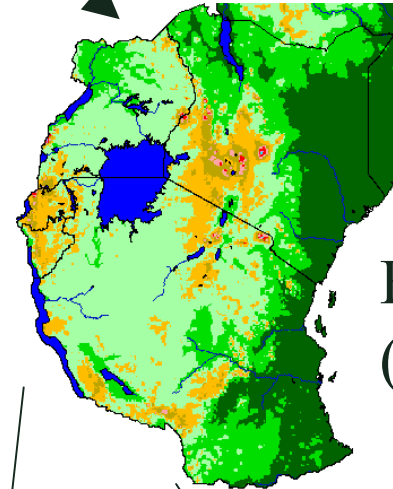


Meteorological Stations



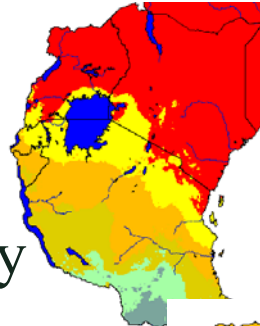
$$\sum_{i=1}^n \left[\frac{z_i - f(x_i, y_i, h_i)}{d_i} \right]^2 + \lambda J(f)$$

Produce daily
'gridded' surfaces

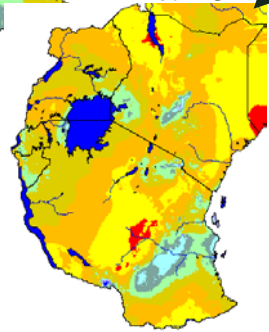


Elevation
(DEM)

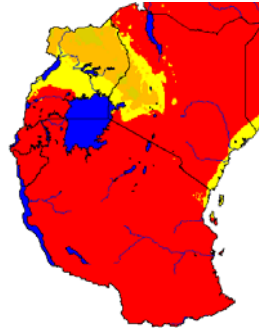
January



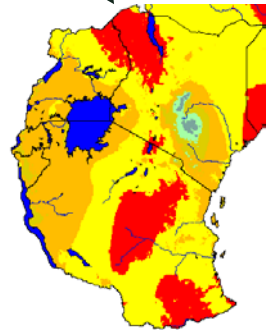
March



July



November



From meteorological stations
(e.g., Chitedze) to daily weather 'surfaces'
= space / time capacity that is location specific

UN-World Food Program

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/FoodPrgrs/Governments

- defining needs
- understanding insurance principles
- **will for pre versus post activities**

Both

More PPP and sustained dialogue!

The Solution

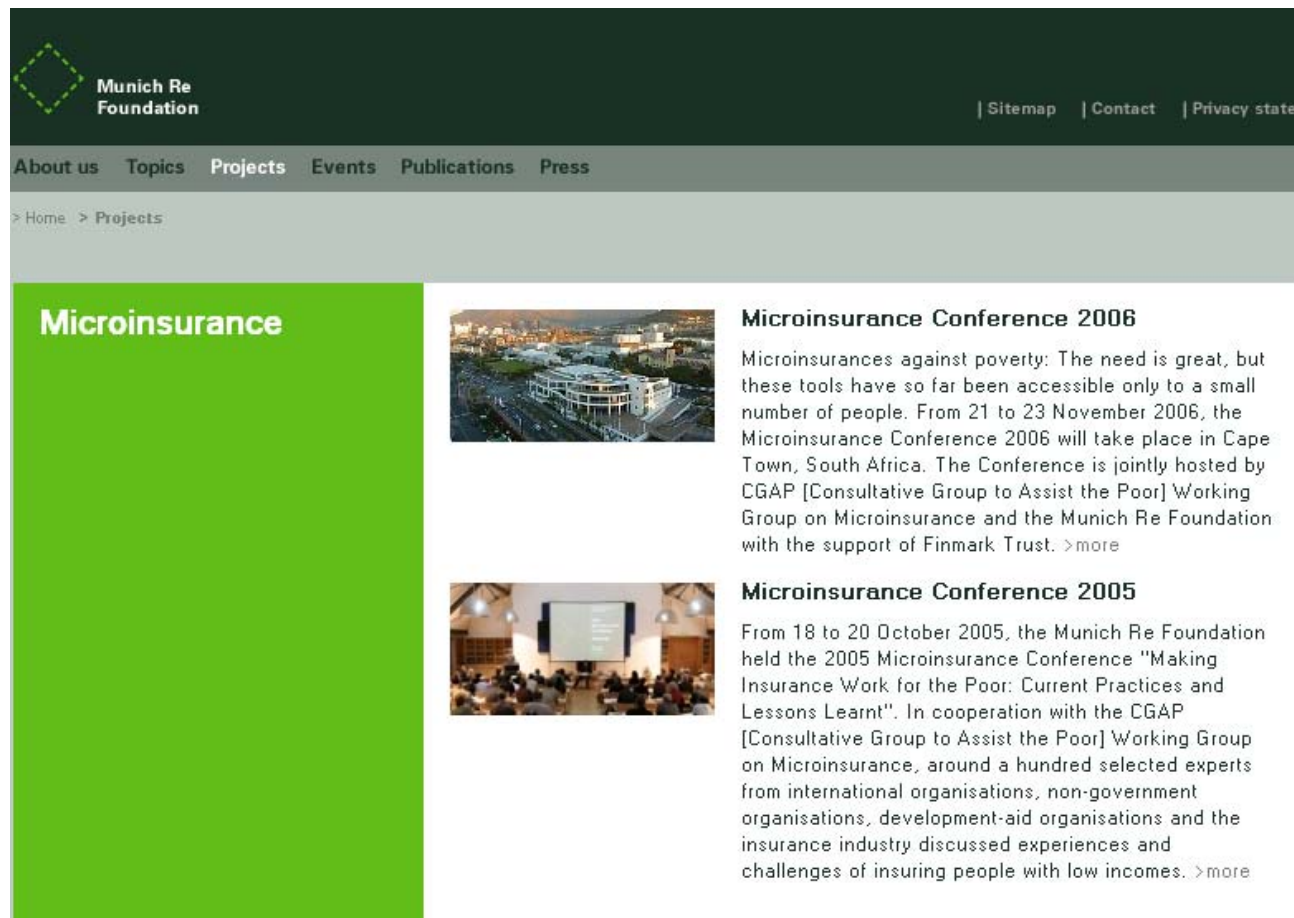
Creating stable Task Forces such as UNEP FI

- 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

2nd International conference 21 – 23 November 2006



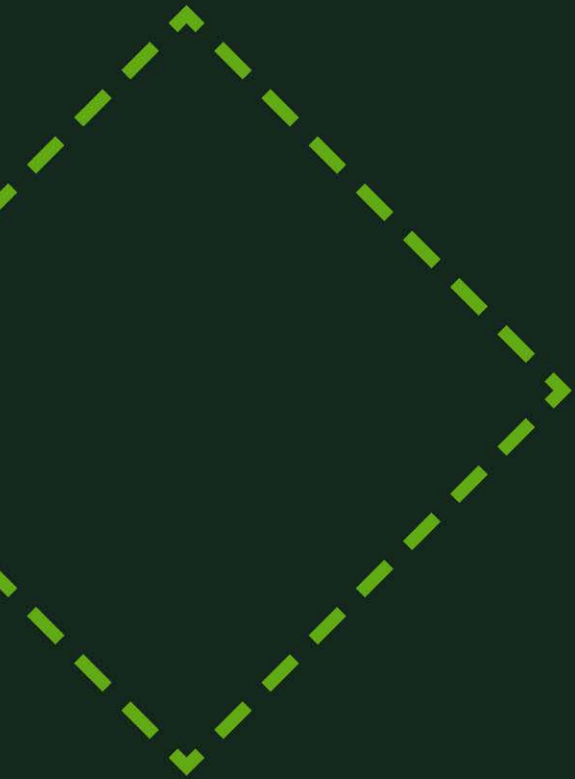
The screenshot shows the Munich Re Foundation website. The header includes the logo and navigation links: Sitemap, Contact, Privacy statement. The main menu lists: About us, Topics, Projects, Events, Publications, Press. The breadcrumb trail is: Home > Projects. A green sidebar on the left contains the word "Microinsurance". The main content area features two articles:

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



**Munich Re
Foundation**
From Knowledge
to Action

November 2006