



UNEP Finance Initiatives
Innovative financing for sustainability

**Insurance and Finance
Supporting the Kyoto Process**

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**Joint UNEP FI & Indian Government Side Event
New Delhi, 29 October 2002**



**Münchener Rück
Munich Re Group**

Insurance Industry - Facts

- **Fast recovery for individuals and economies**
- **Affected people claims**
(strong psychological argument)
- **Risk assessment and tools**
- **Emerging markets account for 10 % of global insurance market but 85 % of global population.**
- **Helping the poor/uninsured:
PPP (Public Private Partnerships)**

Great Weather Disasters 1950 - 2001

Decade comparison

	Decade 1950 - 1959	Decade 1960 - 1969	Decade 1970 - 1979	Decade 1980 - 1989	Decade 1990 - 1999	last 10 1992 - 2001	Factor last 10:60s
Number	13	16	29	44	72	64	4.0
Economic losses	41.2	54.1	79.4	126.1	425.4	362.0	6.7
Insured losses	-	7.2	11.5	23.0	98.9	79.3	11.0

Losses in US\$ billion - 2001 values

MRNatCatSERVICE

As of March 1, 2002

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The climate changes have significant impacts on the insurance industry

- Increase in weather variability
- New extreme values in certain regions
- New exposures
- More frequent and larger natural disasters
- Greater claims potential
- Poorer claims experience
- Lagging premium adjustment
- Rising demand for cover of natural hazards

How can and will the insurance industry prepare for the increasing catastrophe risk?

- **Adequate pricing**
- **Substantial deductibles, based on the respective exposure**
- **Loss prevention**
- **Accumulation control**
- **Improved claims settlement**
- **Reinsurance, retrocession**
- **Liability limits**
- **Exclusion of certain hazards**
- **Exclusion of particularly exposed areas**

Insurance and Natural Hazards

Carrier of the burden/liabilities

limited



Insured

limited



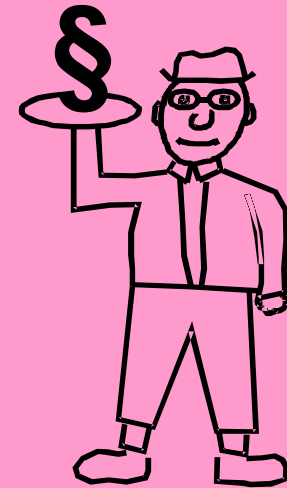
Insurer

limited

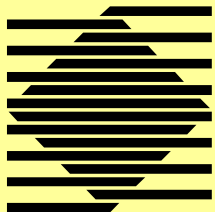


Reinsurer

limited ?

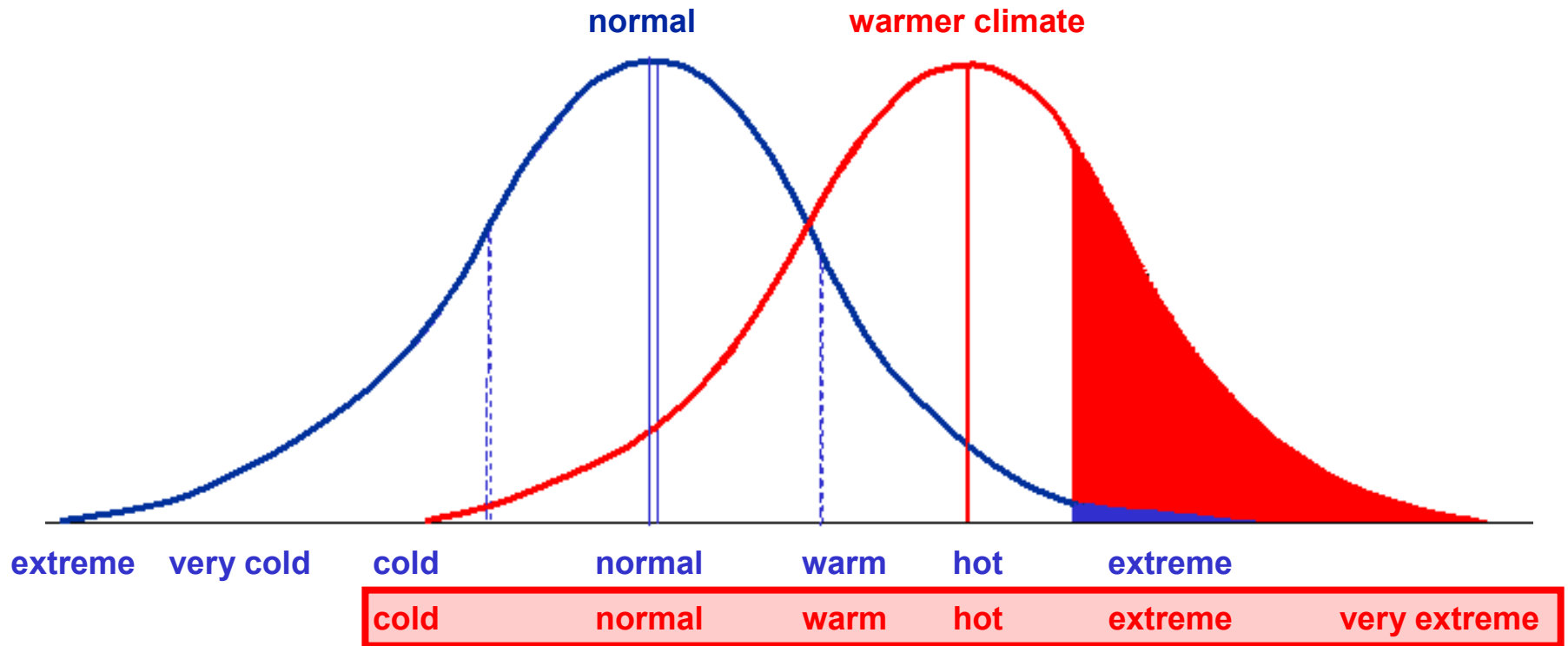


Government



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More heatwaves and droughts in a warmer climate



Weather related extreme events 2001/2002

**Many extreme events in many places
of the globe, but this is no surprise
(the globe is so big)**

Weather related disasters 2001/2002

Global View – only a selection

REGION	EVENT	DATE	REMARK (Losses/RP/Record)
Caribbean	Hurricane Iris	October 2002	Belize: 40 years
Caribbean	Hurricane Michelle	Oct./Nov. 2002	Cuba: 50 years
USA	Tropical Storm Allison	June 2001	US\$ 6 bn
China	Typhoon Utor	July 2001	Hong Kong: rainfall
Korea	Heavy rain	July 2001	37 years
Ethiopia	Hail	August 2001	3.000 cattle killed
Sudan	Floods	August 2001	Nile level: 20 years
Vietnam	Floods	Fall 2001	50 years
Taiwan	Typhoon Nari	Fall 2001	800mm/24hrs
Argentina	Floods	Nov. 2001	
Vietnam	Hail	April 2002	30 years
Costa Rica	Floods	May 2002	60 years
Chile	Storms, floods	June 2002	St: 100y, Fl: 1926

* Losses/Return period/worst since

Weather related disasters 2001/2002

Region Monitor e.g. India, Germany

REGION	EVENT	DATE	REMARK (RP/Record*)
India	Monsoon rains, floods	July/Aug. 2001	Delhi: 40 years
Pakistan	Monsoon rains, floods	July 2001	100 years
Bangladesh	Monsoon rains, floods	July/Aug. 2001	
Nepal	Monsoon rains, floods	July/Aug. 2002	30 years
France (N)	Rain, Floods	April/May 2001	since 1926
Germany	Severe storms	May	Munich: 130 mm
Germany	Severe storms	July 2002	wind, rain
Germany	Rain, Floods	August 2002	> 150 years
Austria	Rain, Floods	August 2002	> 150 years
Czech Rep.	Rain, Floods	August 2002	> 100 years
Spain	Rain, floods	March/Ap. 2002	225mm/3 hours
France (S)	Rain, Floods	September 2002	annual prec./24 hrs.

* Return period/worst since