

**El Colegio de Tlaxcala (Coltla), Tlaxcala, México**  
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**Los Cuatros Pilares de la Seguridad Humana:**

**Libertad de temores, Libertad de pobreza, Libertad de  
impactos de desastres y Libertad de vivir con dignidad**

**Four Pillars of Human Security:**

**Freedom from Fear, Freedom from Want, Freedom from  
Hazards Impacts and Freedom to Live in Dignity**



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# 1. Reconceptualisation of Security: A Global Mental Mapping

- Security is a basic value and goal for each human being, for the nation-state and the international community and organisations.
- Security is determined by our culture, experience, perception and what policy-makers and the media describe it to be.
- Global scientific publication project on: Reconceptualisation of Security aims at a mental mapping of the rethinking on security triggered by both global and regional policy changes and scientific innovations.
- Since 1990 Global Environmental Change has been perceived as a security danger: threat, challenge, vulnerability & risk.
- Climate Change and Desertification are two new security dangers for Mexico during the 21st Century.



# 1.1. A Classical Definition in Political Science & International Relations

- Arnold Wolfers (1962) defined security:
- “Security, in an **objective** sense, measures the absence of threats to acquired values, in a **subjective** sense, the absence of fear that such values will be attacked”.
- Absence of “**threats**”: interest of policy-makers
- Absence of “**fears**”: interest of social scientists, especially of constructivists: “**Reality is socially constructed**”
- Iraq case: WMD: “subject. fear” vs. “lack of obj. threat”

## 2. Causes: Contextual Change of Global International Order

### Political context: Cold War and since 1990

#### Which change is crucial and long-lasting?

- **9 November 1989:** unification of Germany & **Europe:** triggered integration
- **11 September 2001:** vulnerability of US to terrorism **USA:** triggered revival of **Cold War mindset**, military build-up, and constraints on civil liberty: impact of laws on homeland security
- **Latin America:** Third wave of democratisation, economic crisis?

### Social science context: realism → constructivism

- **Kuhn:** Scientific revolutions lead to paradigm shifts
  - **Ideas matter:** emergence of constructivist approaches, security is socially constructed (speech acts), constructivism shift, but no scientific revolution.
  - **Threats matter:** evolution of the new worldview of the neo-conservative ideologues in the US & impact on IR.
- 

## 2.1. Global Contextual Change: 9 November 1989 or 11 September 2001:

- End of the Cold War?



Berlin

- Reunification of Germany
- Enlargement of the EU

- New threats, challenges, vulnerabilities and risks?



New York

## 2.2. Widening, Deepening and Sectorialisation of Security

Since 1990 3 changes of Security Concept in Science & Policy Practice

- **Widening:** Extended security concepts, e.g. in the German Defence White Paper (1994), from military & political dimension to econ., societal, environmental
- **Deepening:** Shift in the referent from the state (national security) to the individual (human security)
- **Sectorialisation:** many international organisations use security: **energy security** (IEA), **health security** (WHO), **food security** (FAO, WFP), **water security** (UNEP, UNU), **livelihood security** (OECD) etc.

## 2.3. Widening of Security Concepts: Towards Environmental Security

### Dimensions & Levels of a Wide Security Concept

Security dimension ⇒ ↓ Level of interaction	Military	Political	Economic	Environmental ↓	Societal
Human individual ⇒			Food/health & water sec.	Cause & Victim	Food/health & water sec.
Societal/Community				↓↑	
National	In Cold War, US since 2001: Shrinking		Energy security	↓↑	
Internat./Regional				↓↑	
Global/Planetary ⇒				GEC	

# 3. Four Pillars of Human Security

- **“Freedom from fear”** by reducing the probability that hazards may pose a survival dilemma for most affected people of extreme weather events (UNESCO, HSN), **Canadian approach: Human Security Report (2005)**
- **“Freedom from want”** by reducing societal vulnerability through poverty eradication programs (UNDP ‘94; CHS 2003: **Ogata/Sen: Human Security Now**), **Japanese approach**;
- **“Freedom to live in dignity”** (**Kofi Annan** in his report: *In Larger Freedom* (March 2005))
- **“Freedom from hazard impact”** by reducing vulnerability & enhancing coping capabilities of societies confronted with natural & human-induced hazards (**UNU-EHS 2004**; Bogardi/Brauch 2005; Brauch 2005a, 2005b).

## 4. First Pillar of HS: Freedom From Fear

- **Requirements and objects:**

- **Rule of Law:** ICC, International Court of Justice and national, regional and local judicial courts and mechanisms
- **Universal Humanitarian Standards:** initiatives in inter. humanitarian and human rights law, human development, human rights education,
- **Good Governance:** capacity building of not only national, but regional and local governments or leadership authorities; fostering democracy; respect for minorities
- **Conflict Prevention/ Post-Conflict Reconstruction:** land mines, child soldiers, protection of civilian population in armed conflict, small arms and light weapons, trans-national organized crime (Ottawa Convention on Anti-personnel Landmines)
- **Strong international institutions**

## 4.1. Human Security Network Members

NATO	EU	Third World
Canada		Chile
Greece	Austria	Costa Rica
Netherlands	Ireland	Jordan
Slovenia		Mali
Norway	Switzerland	Thailand
		South Africa (observer)

**The Network has an interregional & multiple agenda, strong links to civil society & academia.**

**The Network emerged from landmines campaign at a Ministerial, Norway, 1999.**

**Anti-personal Landmines, Intern. Criminal Court, protection of children in armed conflict, control of small arms & light weapons, fight against transnational organized crime, human development, human rights education, HIV/AIDS, implementation of international humanitarian & human rights law, conflict prevention**

# 5. Freedom From Want:

## Human Security Commission: Human Security Now

- **Broad:** wider agenda, conceptually more convoluted
  - **Goal:** reducing individual/societal vulnerabilities in the economic, health, environment, political, community, and food sphere. To create conditions that can lead to empowerment for individuals,
  - **Japanese FM:** HS “comprehensively covers all menaces that threaten human survival, daily life, and dignity...and strengthens efforts to confront these threats”
  - **Threats:** diseases, poverty, financial crises, hunger, unemployment, crime, social conflict, political repression, land degradation, deforestation, emission of GHGs, environmental hazards, population growth, migration, terrorism, drug production and drug trafficking
- 



# 5.1. Ogata & Sen: Human Security Now

## Ogata/Sen: 2 Approaches: Protection & Empowerment

### Protection:

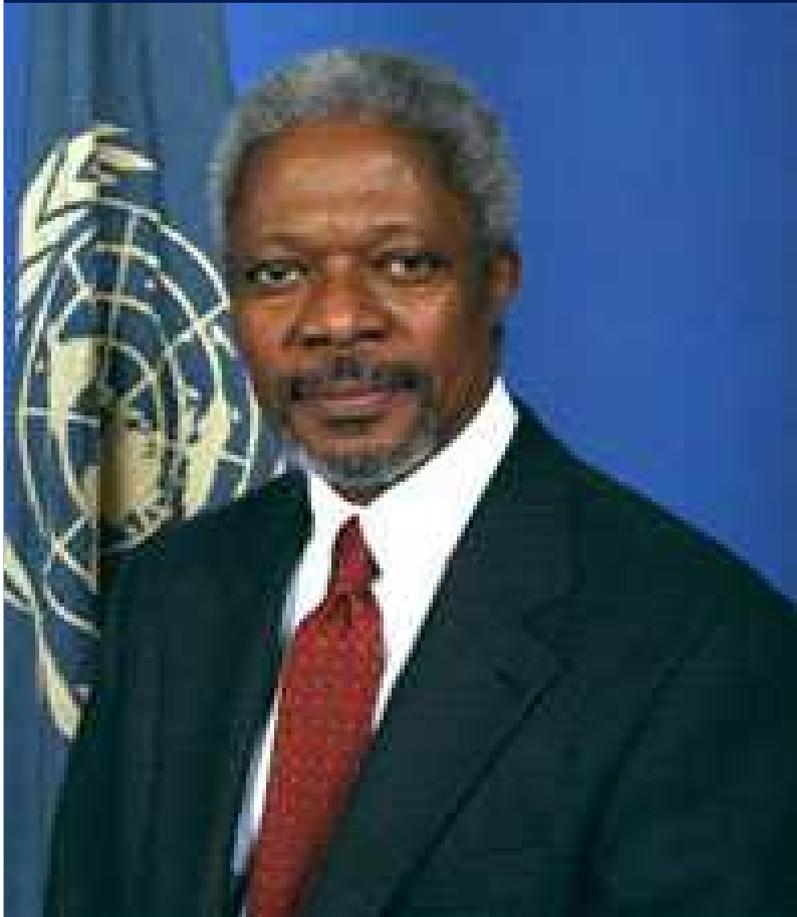
- protection in violent conflict
- proliferation of arms
- protection and funds for post-conflict situations
- strengthening the rule of law
- developing norms and institutions to address insecurities

### Empowerment:

- achieve UN Millenium Development Goals, poverty eradication encouraging fair trade and markets
- sustainable development
- universal access to basic health care
- universal education

• Protection and Empowerment are Mutually Reinforcing!

# 6. Freedom to Live in Dignity



- **Kofi Annan** – need for a human centered approach to security  
“human security can no longer be understood in purely military terms.”
- It must encompass economic development, social justice, environmental protection, democratisation, disarmament, and respect for human rights and the rule of law.”
- “Embraces far more than the absence of violent conflict”

# in larger freedom

TOWARDS SECURITY, DEVELOPMENT AND HUMAN RIGHTS FOR ALL

Report of the Secretary-General of the United Nations  
for decision by Heads of State and Government in September 2005

عربي 中文 English Français Русский Español

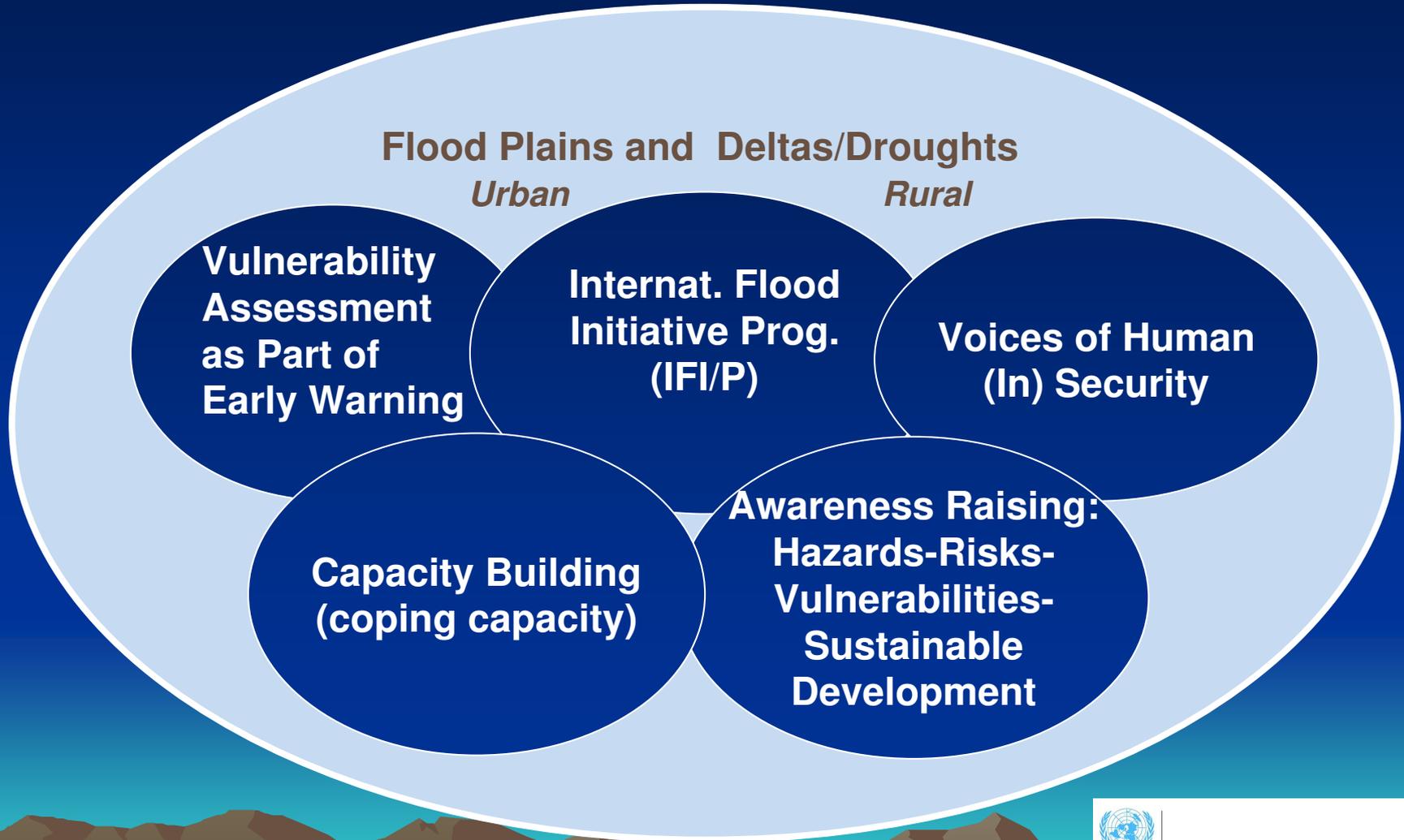
## 6.1. Third Pillar of HS: “Freedom to live in dignity” (Annan 2005)

- **Development, security & human rights** reinforce each other.
- **Poverty & denial of human rights** may not “cause” civil war, terrorism or organized crime, all greatly increase the risk of instability and violence.
- **No development without security, no security without development, we will not enjoy either without respect for human rights.**
- In **Millennium Declaration**, Member States stated to promote democracy, rule of law, respect for human rights and fundamental freedoms.
- **All human beings** have the **right** to be treated with dignity and respect.
- Promotion of **universal values of rule of law**, human rights & democracy are ends in themselves, essential for a world of justice, opportunity & stability. No security agenda & drive for development will be successful unless based on human dignity.

# 7. Freedom From Hazard Impacts

- **UNU-EHS:** Bogardi/Brauch (2005), Brauch (2005)
- **Goal:** reduce vulnerabilities & enhance capacity building & coping capabilities of societies faced with natural hazards
- Threats/Hazards:
  - **Environmental:** floods, droughts, and other natural disasters, environmental degradation, lack of water or clean water, human-induced climate change, exhaustion of fish resources, depletion of finite resources (e.g. oil, gas)
  - **Societal:** poverty, improper housing, insufficient food and water, malfunctioning of technical systems, traffic accidents, population explosions, terrorism and organized crime
- **Develop vulnerability indicators and vulnerability mapping** to apply to operational realm by working on solutions
  - improved early warning systems\_capacity-building for early warning
  - disaster preparedness (education and training, infrastructure)
  - coordinated rapid disaster response by local, regional and national level
  - developing clear guidelines for post hazard reconstruction
  - **long term strategies:** e.g. Kyoto, Montreal Protocol
  - **adaptation measures:** e.g. dams, switching to renewable energy
  - **mitigation measures:** restrict housing in hazard areas (coastal areas-flooding, mud slides), charging more for garbage disposal and energy usage, birth control measures

# 7.1. Research Goals of UNU-EHS

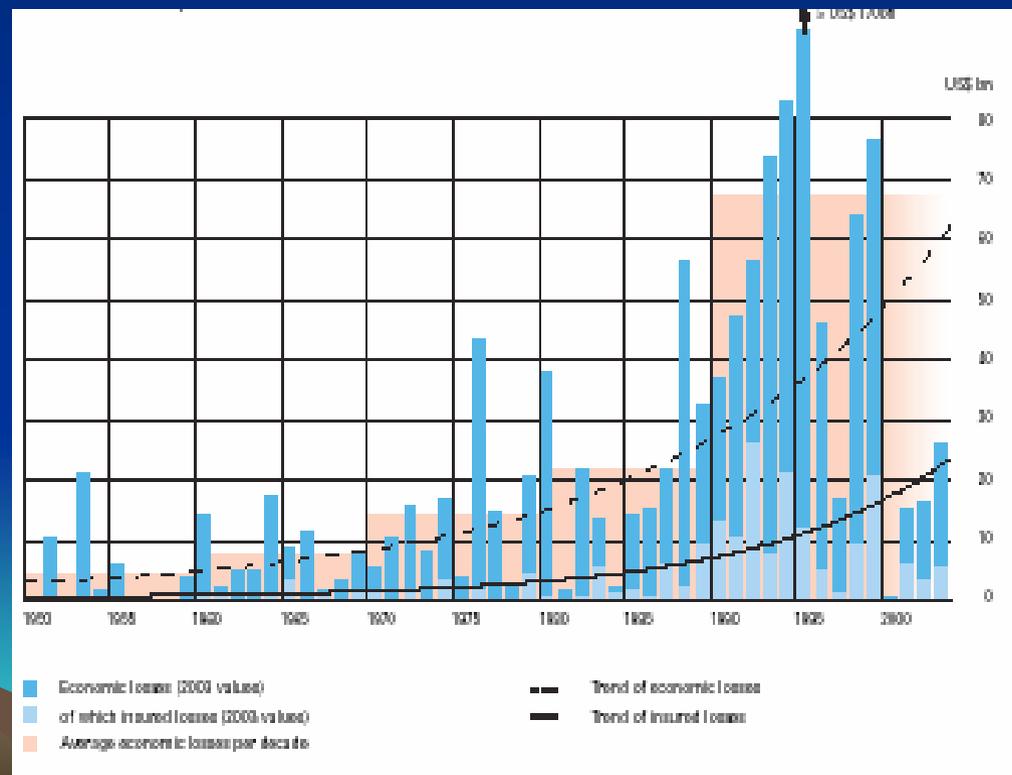


Distribution of natural disasters: by origin  
(1900-2003, by decades\*)

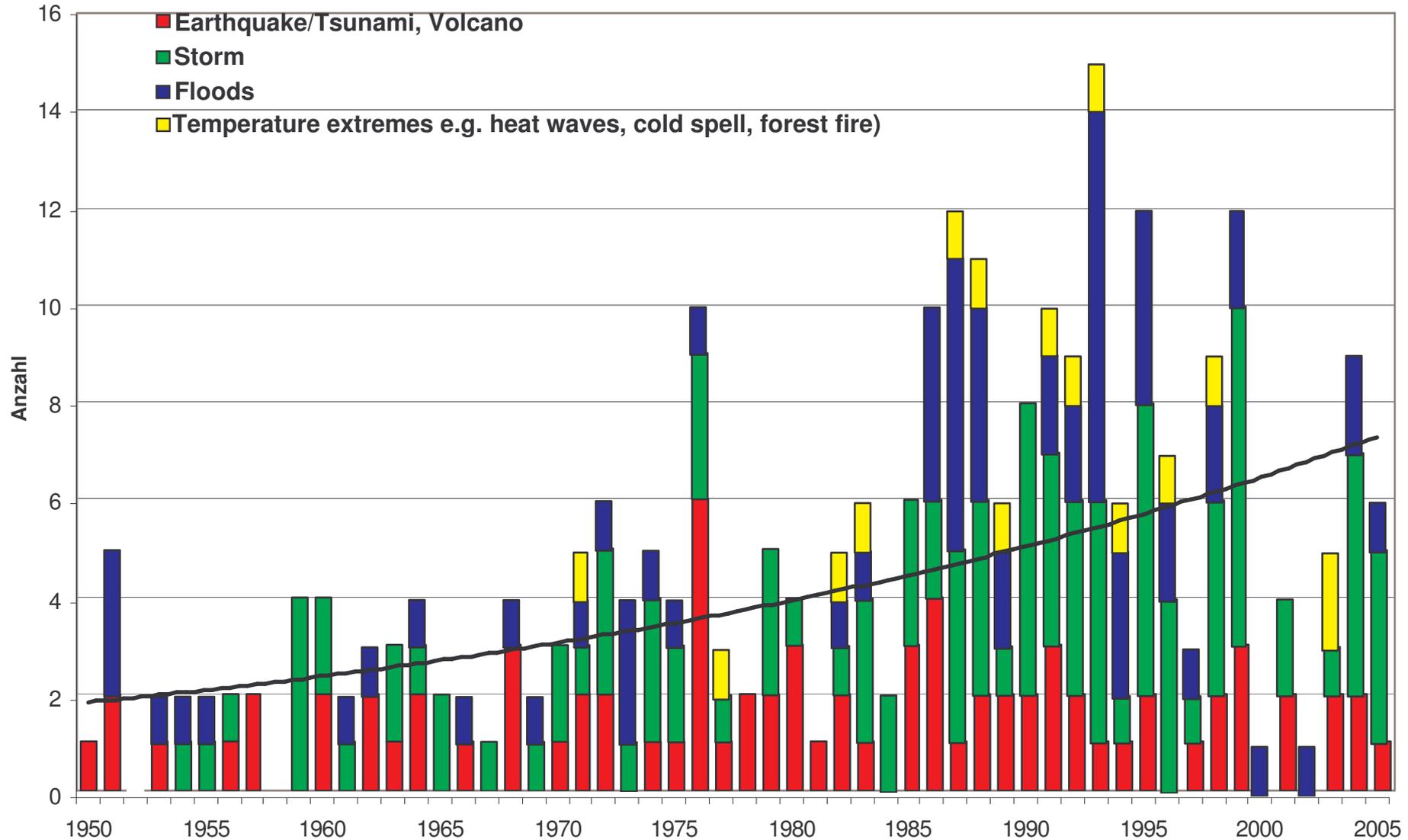
	1900-1909	1910-1919	1920-1929	1930-1939	1940-1949	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2003	Total
Hydrometeorological	28	75	56	74	128	280	511	795	1575	2139	1444	7105
Geological	36	26	32	38	53	58	94	128	234	283	152	1134
Biological	5	12	10	3	3	3	40	65	167	351	297	956
<b>Total</b>	<b>69</b>	<b>113</b>	<b>98</b>	<b>115</b>	<b>184</b>	<b>341</b>	<b>645</b>	<b>988</b>	<b>1976</b>	<b>2773</b>	<b>1893</b>	<b>9195</b>

650 990 2000 2800 4700

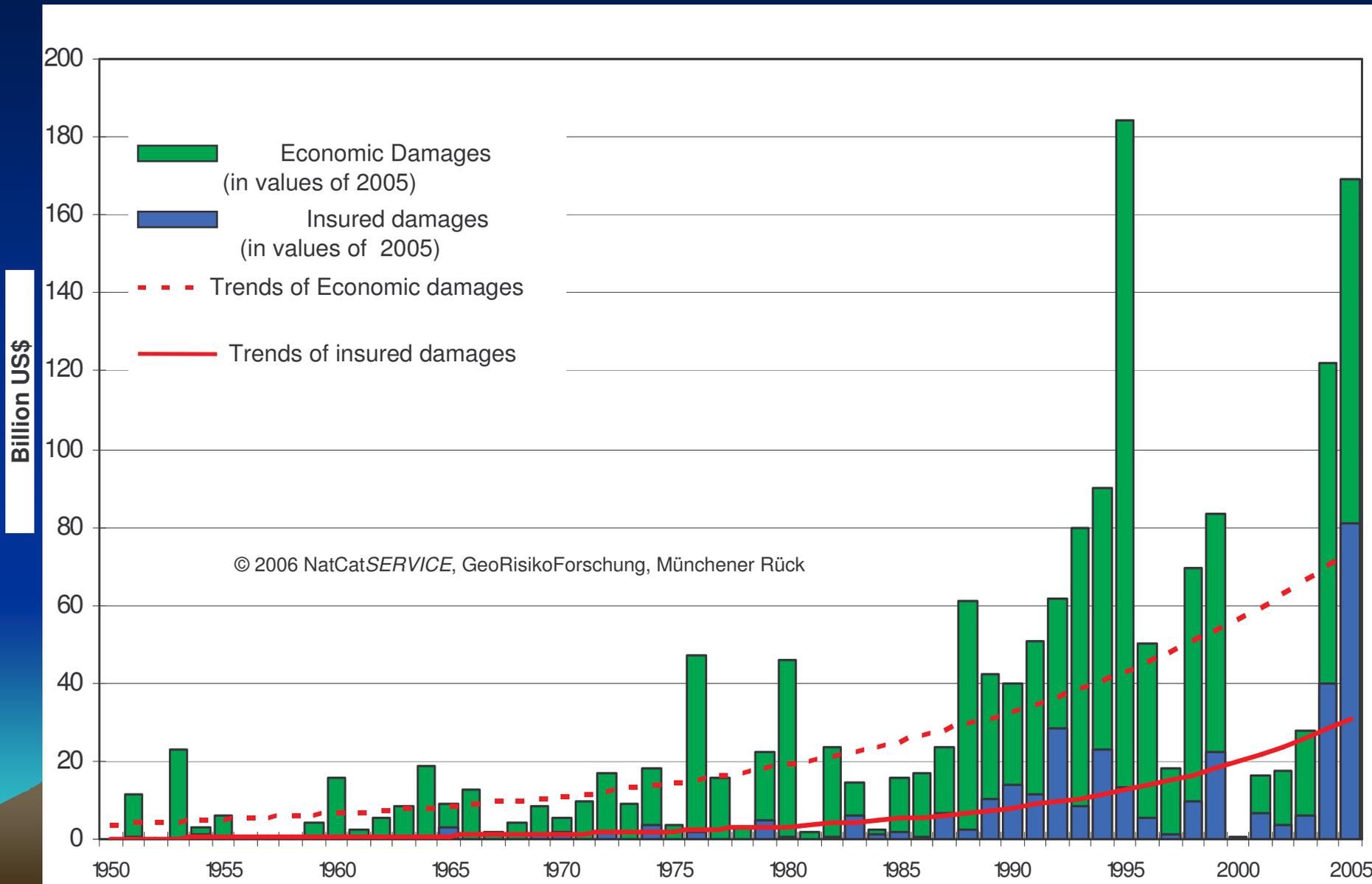
## 7.2. Global Impacts of Natural Hazards



# 7.3. Major Natural Hazards (1950-2005), Number of Events

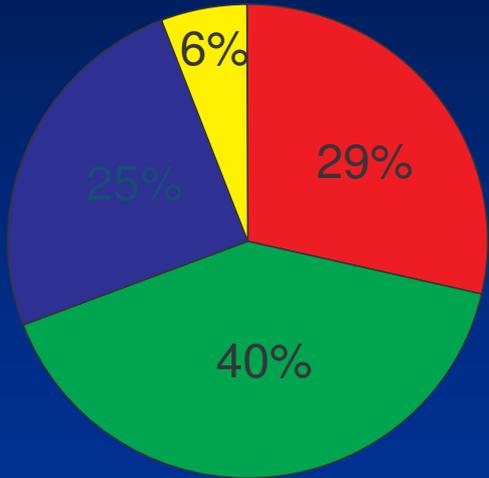


# 7.4. Major Natural Hazards (1950-2005), Economic and Insured Losses



# 7.5. Major Natural Hazards (1950-2005)

267 Events



Geological events

Earthquake/Tsunami, Volcano

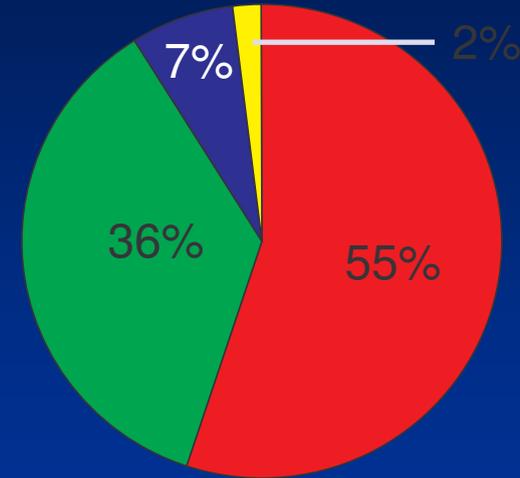
Weather-related events

Storm

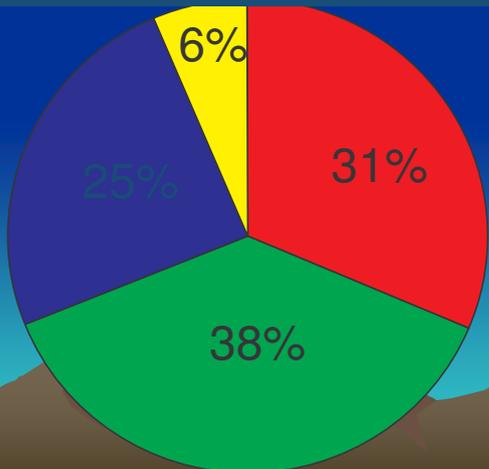
Floods

Extreme temperatures

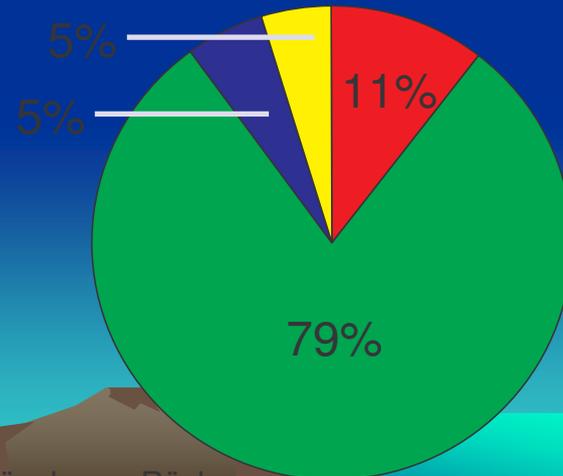
1,75 Million Dead



Economic damage: 1.400 billion US\$

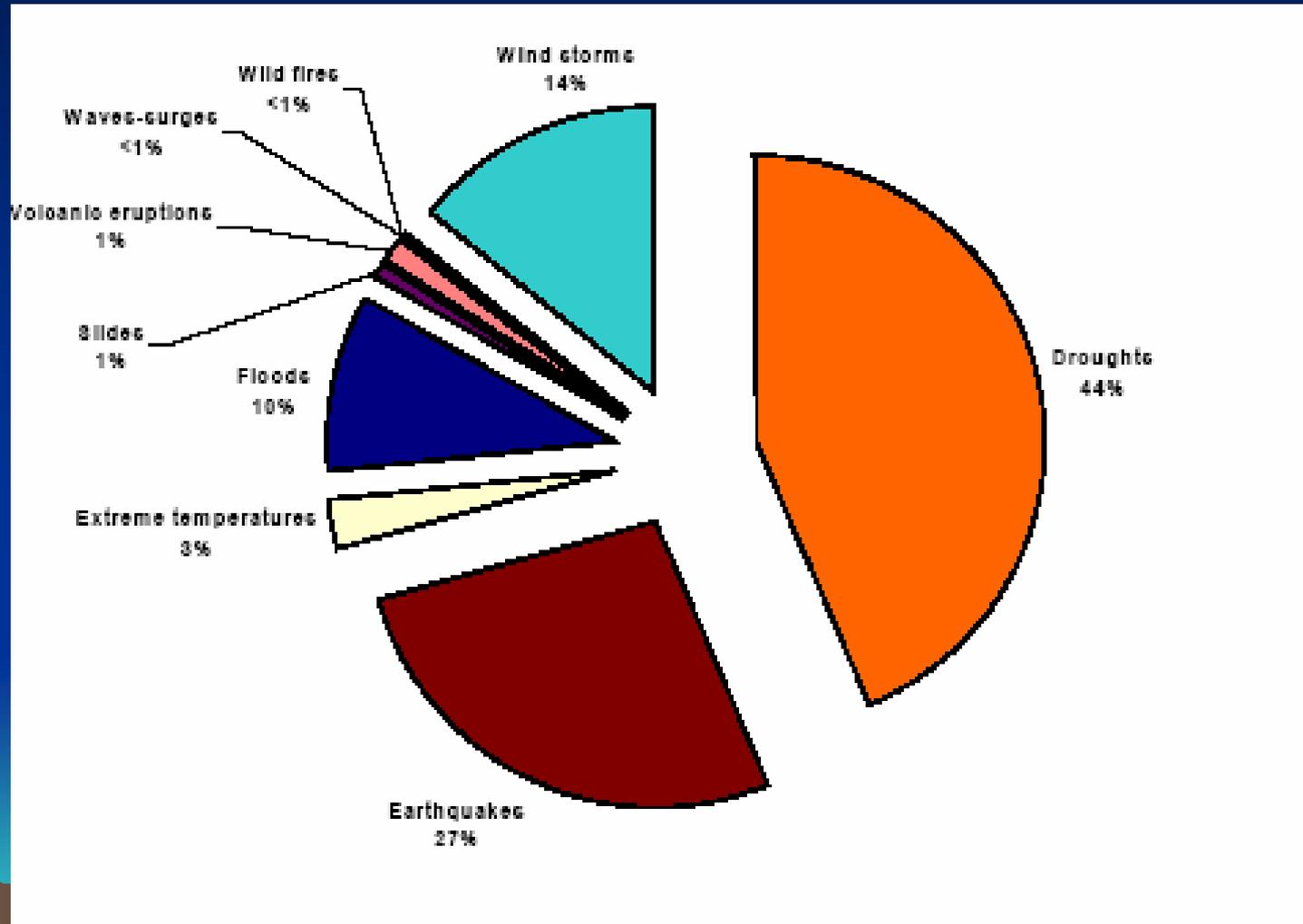


Insured damage: 340 billion US\$



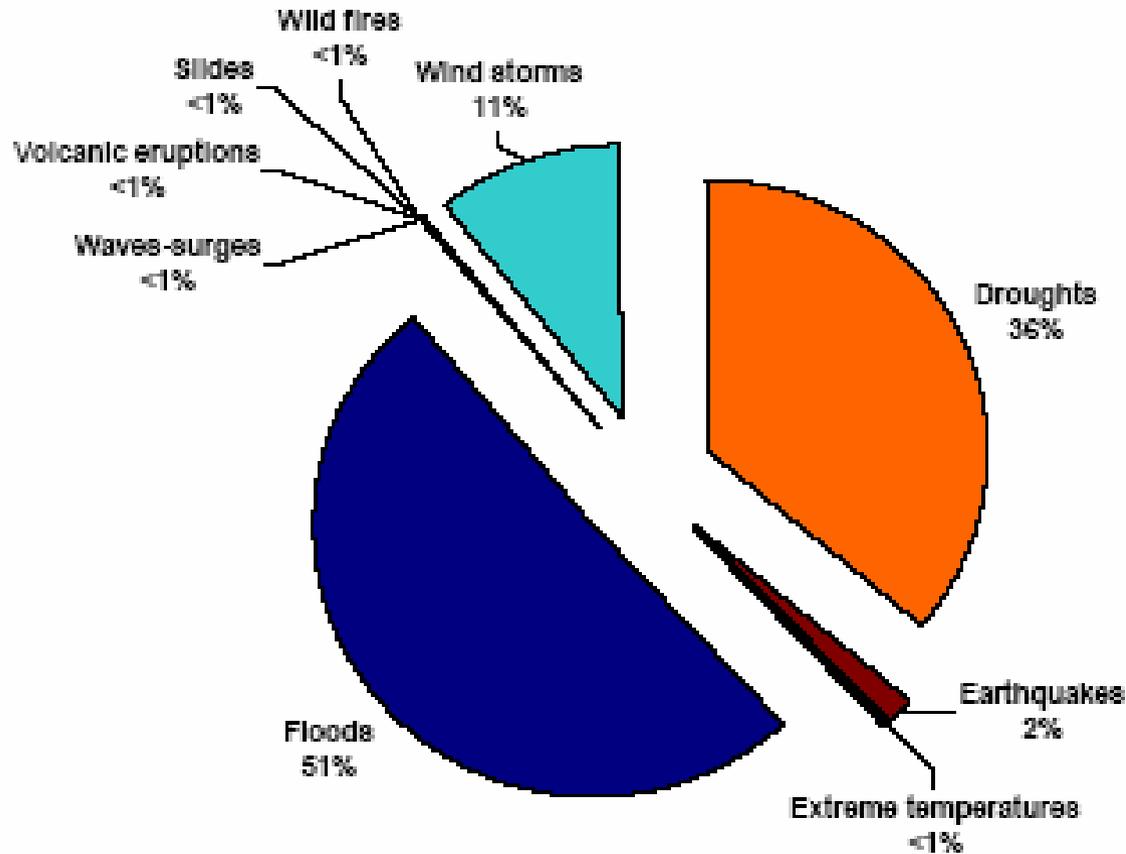
\*in Werten von 2005

# 7.6. Reported Death of Natural Hazards globally (1974-2003): 2.066.273 persons



Source: Hoyois und Guha-Sapir (2004)

# 7.7. Affected persons of Natural Hazards globally (1974-2003): 5 076 494 541 persons



(1) injured + homeless + affected

Source: Hoyois und Guha-Sapir (2004)



## 7.8. Natural Hazards in Mexico

(Source: CRED: number of people killed)

Disaster	Date	Killed
Earthquake	19-Sep-1985	9,500
Flood	1959	2,000
Volcano	1949	1,000
Wind Storm	27-Oct-1959	960
Flood	12-Sep-1999	636
Wind Storm	1-Oct-1976	600
Wind Storm	28-Sep-1955	500
Earthquake	28-Aug-1973	500
Wind Storm	12-Nov-1961	436
Extreme Temperature	30-Apr-1990	380



# 7.9. Natural Hazards in Mexico

(Source CRED: number of people affected)

Disaster	Date	Total Affected
Earthquake	19-Sep-1985	2,130,204
Wind Storm: Rita	1-Oct-2005	1,954,571
Wind Storm: Wilma	19-Oct-2005	1,000,000
Wind Storm	8-Oct-1997	800,200
Flood	12-Sep-1999	616,060
Wind Storm	15-Jul-1976	300,000
Wind Storm	1-Oct-1976	276,400
Wind Storm	Aug-1967	271,000
Wind Storm	Dec-1983	257,500
Flood	16-Sep-1993	231,290



## 7.10. Natural Hazards in Mexico

(Source CRED: economic damage costs)

Disaster	Date	Damage US\$ (000's)
Earthquake	19-Sep-1985	4,104,000
Wind Storm	22-Jun-1993	1,670,000
Drought	May-1996	1,200,000
Flood	3-Sep-1998	602,700
Flood	12-Sep-1999	451,300
Wind Storm	8-Oct-1997	447,800
Wind Storm	24-Sep-2001	400,000
Wind Storm	17-Jan-1988	250,000
Wind Storm	10-Oct-1995	241,000
Earthquake	15-Jun-1999	226,800

## 7.11. Summarized Table of Natural Disasters in Mexico (1929-2005)

	# of Events	Killed	Injured	Homeless	Affected	Total Affected	DamageUS (000's)
<b>Drought</b>	8	0	0	0	65,000	65,000	1,729,500
ave. per event		0	0	0	8,125	8,125	216,188
<b>Earthquake</b>	27	10,677	33,287	112,275	2,411,015	2,556,577	4,691,000
ave. per event		395	1,233	4,158	89,297	94,688	173,741
<b>Epidemic</b>	2	68	0	0	11,525	11,525	0
ave. per event		34	0	0	5,763	5,763	0
<b>Extreme Temperature</b>	16	1,207	0	16,000	0	16,000	82,600
ave. per event		75	0	1,000	0	1,000	5,163
<b>Flood</b>	45	4,083	659	165,990	1,336,695	1,503,344	1,491,900
ave. per event		91	15	3,689	29,704	33,408	33,153
<b>Slides</b>	6	202	0	120	200	320	0
ave. per event		34	0	20	33	53	0
<b>Volcano</b>	10	1,120	500	15,000	146,408	161,908	117,000
ave. per event		112	50	1,500	14,641	16,191	11,700
<b>Wild Fires</b>	3	83	0	0	0	0	83,200
ave. per event		28	0	0	0	0	27,733
<b>Wind Storm</b>	61	4,972	1,803	616,250	4,927,386	5,545,439	3,943,345
ave. per event		82	30	10,103	80,777	90,909	64,645

## 8. Cooperative Strategies for Mexico in Dealing with Human Security Challenges

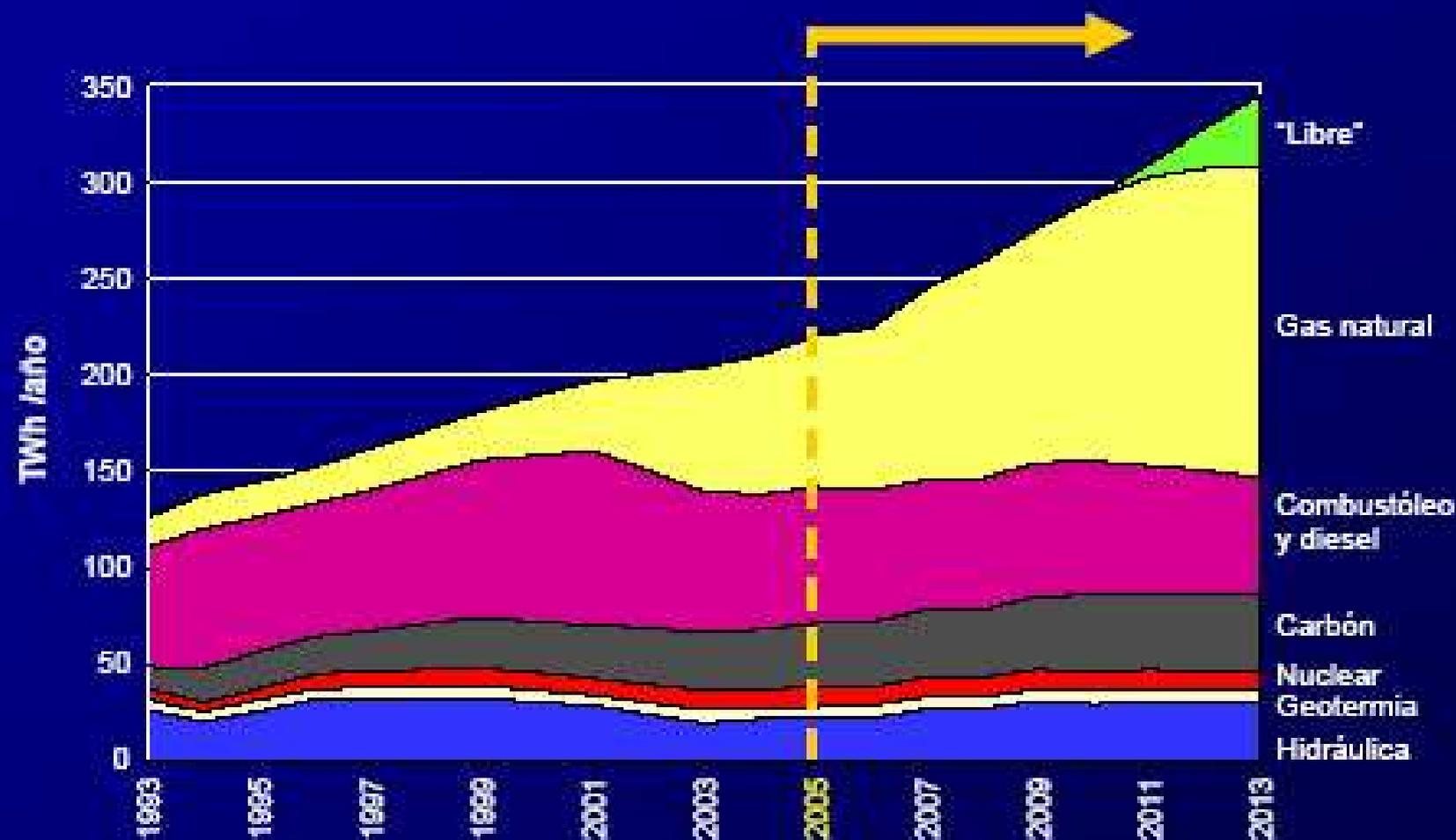
- Climate change, desertification & water scarcity & degradation are real: will have global impacts & for Mexico in the 21st century,
- Environmental & human security challenges have affected and will affect Mexico even more during the 21st century;
- As a multi-hazard country: Mexico has increasingly been affected by water-related hazards (hurricanes, floods, droughts, land-slides). She have increased & economic damage (e.g. in 2005)
- Energy sector: is cause and one of long-term solutions to global warming:
- Mexico has large potential of geothermal, solar (thermal & PV), wind power, biomass, rural & urban waste: electricity, hydrogen
- Declining reserves of oil & gas and rising demand (population & economic growth): two key drivers for renewables
- Cooperation: UN, UNESCO, OAS, NAFTA, HSN (Canada, Chile, Costa Rica)
- Cooperation with EU countries on electricity feed-in law & new energy law, wind power, solar power (huge unused potential of deserts)

# 8.1. Gradual Shift to Renewable Energy

- **IEA: World Energy Outlook (2005):** Mexico oil production increases from 3,8 (2004) to 3,9 million barrels per day (2010) and declines to 3,4 (2030).
- Juan Mata (DG Research, Secretaría de Energia, Feb. 2006): projection for power sector in Mexico: 2005-2013: diesel: decline; minor increase in coal, hydropower, doubling of natural gas, new renewable
- US\$ Mio 25-46 large scale wind energy project
- Projects (GEF, GTZ, USAID, REEEP: public-private partnership, launched by Gov. of Mexico:
  - Methodology for assess value of risk reduction be RE
  - Contribution of intermittent sources to grid capacity
  - Small-scale self-supply (PV)
  - Dispatch & planning models to incorporate wind in elect. Sector
  - Long-term prospective study of RE
  - **REEEP: Latin American Regional Sustainable Energy Policy Development Forum**



- Power sector: A growing dependence on natural gas...



# 9. Conclusions

1. Security can no longer employ the state as the sole referent. **States can no longer monopolize the security realm** as they have in the past.
2. Human Security depending on the perspective or very broadly is threatened by **underdevelopment** (freedom from want), **violent conflict** (freedom from fear), and **societal and natural hazards** (freedom from hazard impacts)
3. A greater attempt needs to be made **to reach a consensus** on more precise conceptual definitions and more importantly, better operationally practical measures
4. **Key Struggle for HS:** to identify priority issues without becoming too overstretched and therefore operationally unfeasible.

**Thank you  
for inviting and giving me an  
opportunity to share with you my  
conceptual ideas.**

**Thank you for your attention  
and patience.**

**Send your comments to:  
[brauch@onlinehome.de](mailto:brauch@onlinehome.de)**

