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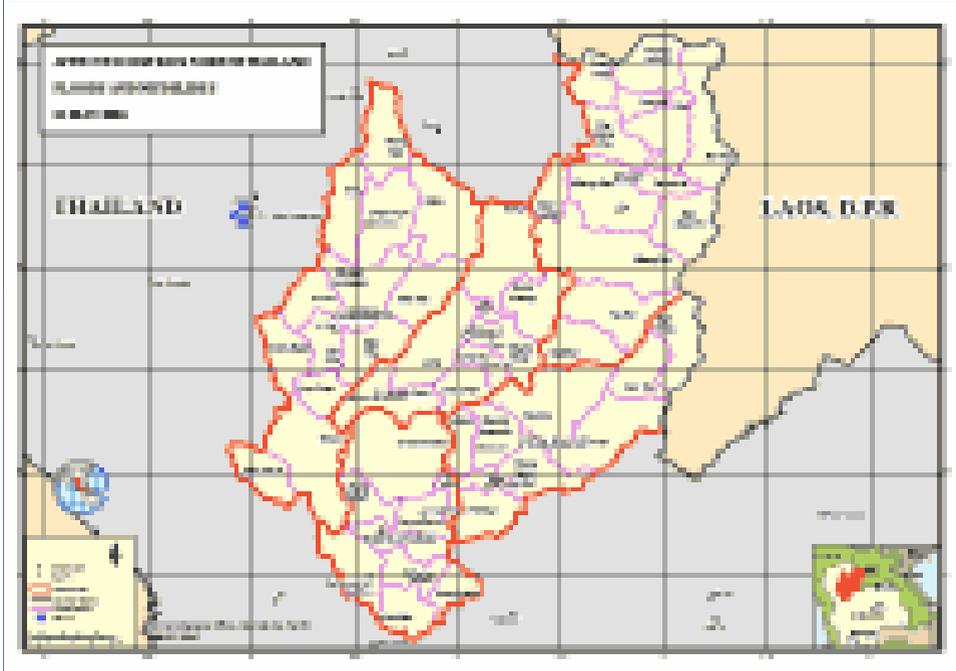
Free University of Berlin, Otto-Suhr-Institute for Political Science
United Nations University, Institute for Environment and Human Security (UNU-EHS)
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Towards a Fourth Pillar of Human Security: „Freedom from Hazard Impacts“ Addressing Global Environmental Change, Environmental Stress and Natural Hazards

Human Security Network
International Symposium On Building and
Synergizing Partnership for Global Human
Security and Development

Bangkok, Thailand, 30-31 May 2006

<- Satellite Image of Extreme Weather Event Leading to Flash Flood & Landslides in Thailand on 21-24 May 2006 as HS Challenge



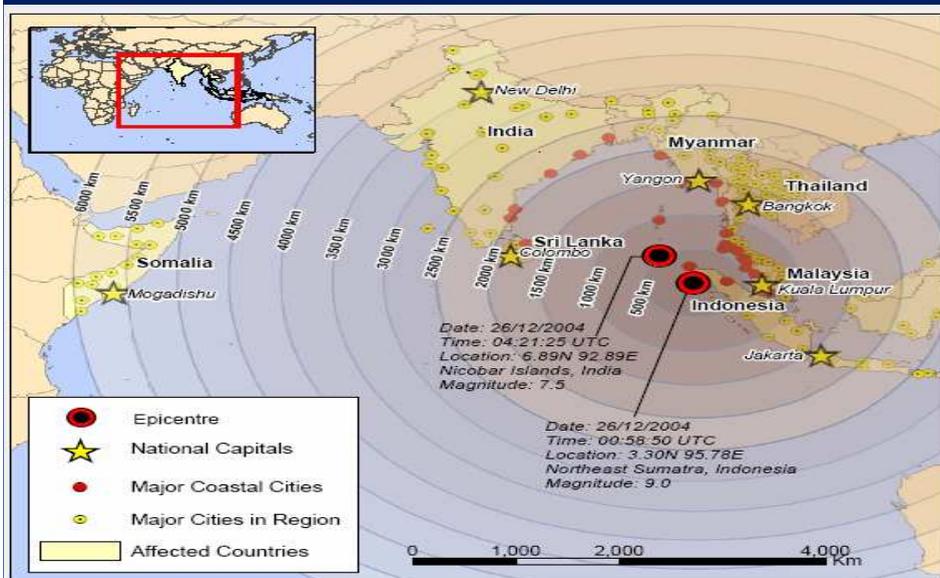
Department for Disaster Prevention and Mitigation (DDPM):
357 villages in Nan, Phrae, Lamphang, Uttaradit and Sukhothai are affected by the **flash floods since 22 May**. Water levels have receded in 3 provinces (Phrae, Lamphang, Nan). In Uttaradit Prov., 3 districts are still badly affected.

Losses and Casualties are :

- 70-100 persons reported dead (25.3.)
- 75 missing
- 70,000- 103,355 persons affected (more than during Tsunami 26.12.2006)
- 1,240 persons evacuated
- 80 roads & 28 bridges damaged

Days of rain triggered severe flash floods & landslides, which struck 23 May, damaging roads, railways and power lines. Heavy rains that started on 21 May caused rivers and reservoirs to overflow in the Northern part of Thailand. Source. OCHA, 24.5.06

Hazard Impacts of Tsunami of 26 Dec. 2004 regionally and for Thailand



IMPACT ON VULNERABLE POPULATIONS

- 50,000 children were affected
- estimated 1,480 children lost one or both parents.
- More women than men were killed in the tsunami.
- children more vulnerable to abuse, incl. sexual exploitation.

DAMAGES AND LOSSES

- Six southern provinces were severely impacted.
- Over 120,000 individuals in tourism sector lost their jobs.
- 30,000 individuals employed in fisheries sector lost sources of livelihood.
- 4,806 houses were affected. 3,302 were completely destroyed, and 1,504 were partially damaged.
- Ca. 5,000 boats were lost or damaged.
- 2,000 hectares of agricultural land were destroyed.
- 305 acres of mangroves, 3,600 acres of coral, and 400 seagrass beds were impacted.
- 102 large ponds, 2,321 wells, and two ground wells were contaminated.
- The loss of income in the tourist industry is estimated to be \$25 million monthly.
- The Thai Hotels Association estimated that hotel occupancy fell by 20 percent in 2005.

FINANCIAL IMPLICATIONS

- Losses: \$1.6 billion and costs of repairing: \$482 million.
- \$21.4 million was requested in humanitarian assistance
- Thailand received \$18 million, of which \$7.5 million has been spent in Nov. 2005.
- \$38.3 million is being delivered in mid- to long-term recovery programming for 2005–06.

HUMAN TOLL for Thailand:

- Number of fatalities: 8,212.
(2,448 non-Thais of 37 count.)
- No. of people missing: 2,817.
- No. of displaced: 6,000.

Worst natural disaster in 50-100 years.

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1. 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**
- **“Freedom from want”** by reducing societal vulnerability through poverty eradication programmes (UNDP 1994; 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 (Bogardi/Brauch 2005; Brauch 2005a, 2005b).

1.1. First Pillar of HS: “Freedom From Fear”

- **Primary Focus of the Human Security Network**
 - **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 international, 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**
- 

1.2. “Freedom From Want”:

Human Security Commission: Human Security Now

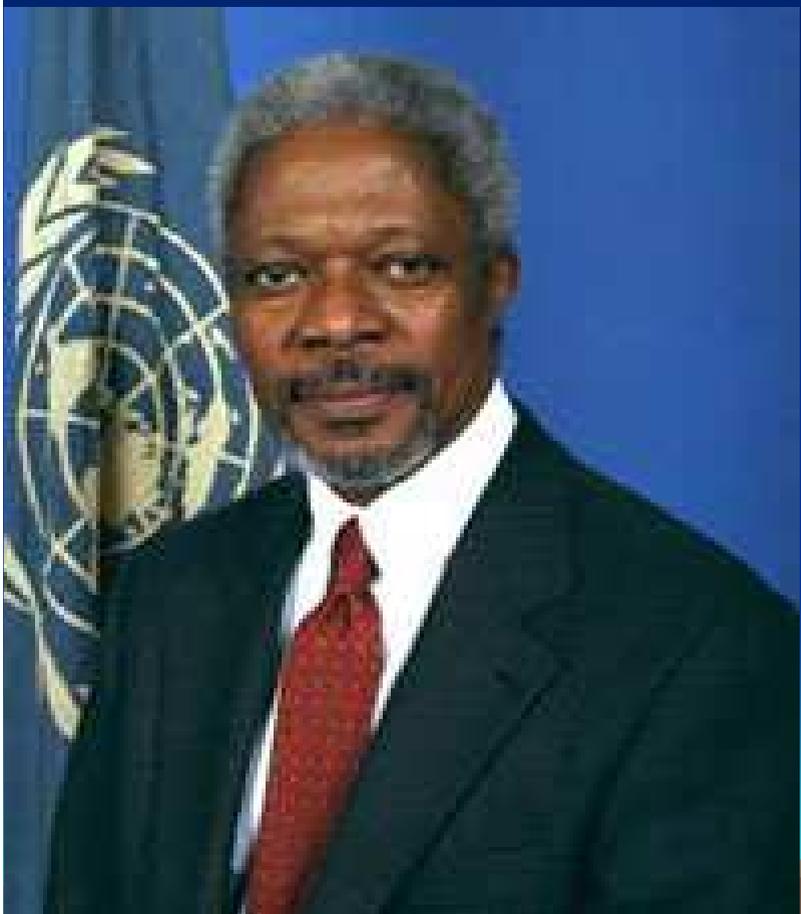
- **Broad:** wider agenda, conceptually more convoluted
- **Goal:** reducing individual/societal vulnerabilities in the economic, health, environment, political, community, and food sphere. Create conditions that can lead to empowerment for individuals,
- **Japanese FM:** HS “comprehensively covers all 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, environm. hazards,
 - population growth, migration, terrorism, drug production & trafficking.





1.3. “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”



2. “Freedom From Hazard Impacts”

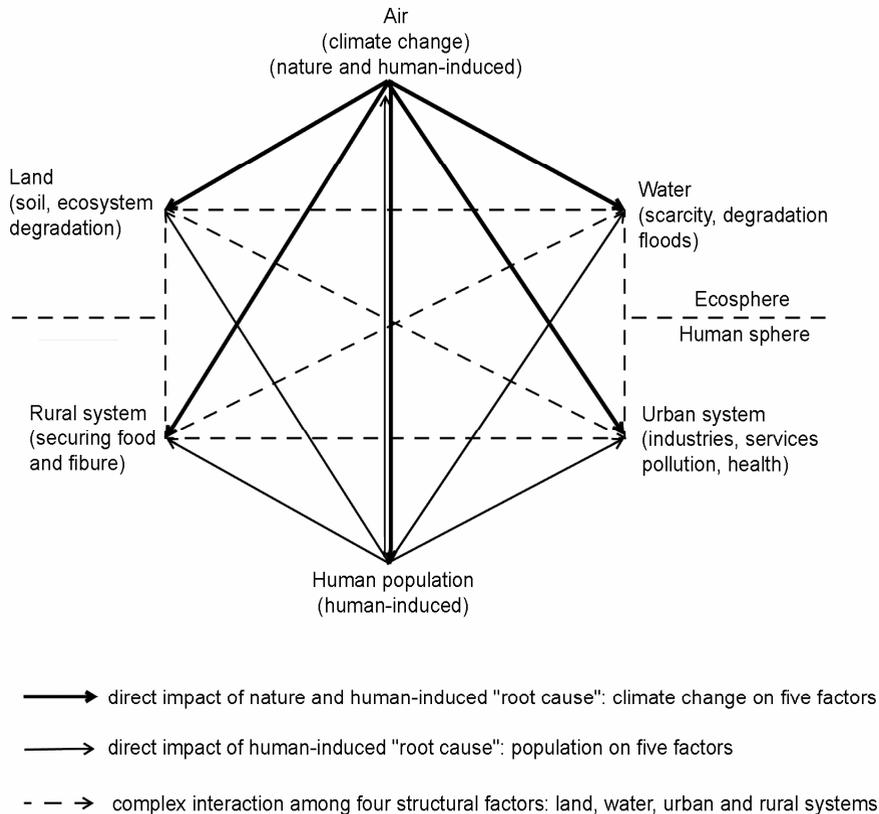
- **UNU-EHS:** Bogardi/Brauch (2005), Brauch (2005)
- **Goal:** reduce vulnerabilities & enhance capacity building & coping capabilities of societies faced with natural hazards
- **Threats/Hazards:**
 - **Environmental:** floods, droughts, and other natural disasters, environmental degradation, lack 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

3. PEISOR Model: Global Change, Environmental Stress & Extreme Outcomes

- The model distinguished 5 stages:
 - **P: Pressure:** Causes of GEC : Survival hexagon
 - **E: Effect:** environm. scarcity, degradation & stress
 - **I: Impact:** Extreme or fatal outcome: hazards
 - **S: Societal Outcomes:** disaster, migration, crisis, conflict, state failure etc.
 - **R: Response** by the state, society, the economic sector and by using traditional and modern knowledge to enhance coping capacity and resilience



4. Cause: Pressure of Global Environmental Change: Six Determinants: Survival Hexagon



Ecosphere:

- **Air: Climate Change**
- **Soil: Degradation, Desertification**
- **Water: degradat./scarcity**

Anthroposphere:

- **Population growth/decline**
- **Rural system: agriculture**
- **Urban system: pollution etc.**

Mode of Interaction

- **Linear, Nonlinear**
- **Exponential**
- **Chaotic, abrupt**

4.1. Global Climate Change: Temperature Increases & Sea Level Rise

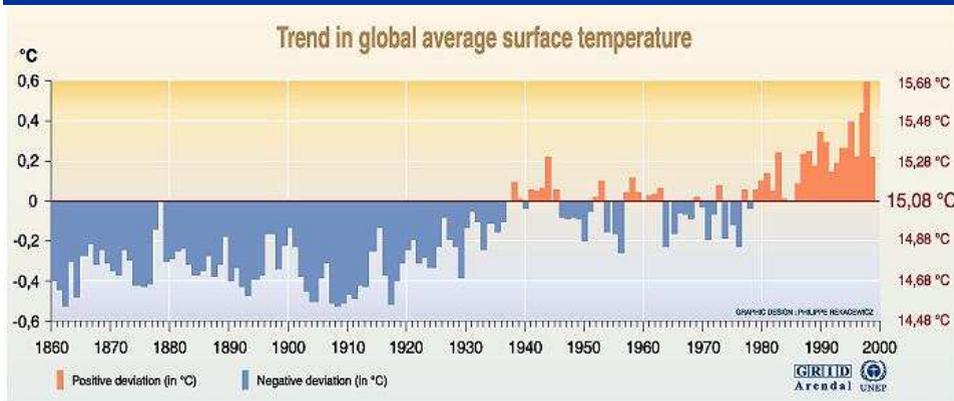
2 Climate Change Impacts: Temperature & Sea level Rise

- ❖ Global average temperature rise in 20th century: **+ 0.6°C**
- ❖ Proj. temperature rise: 1990-2100: **+1.4 – 5.8°C**

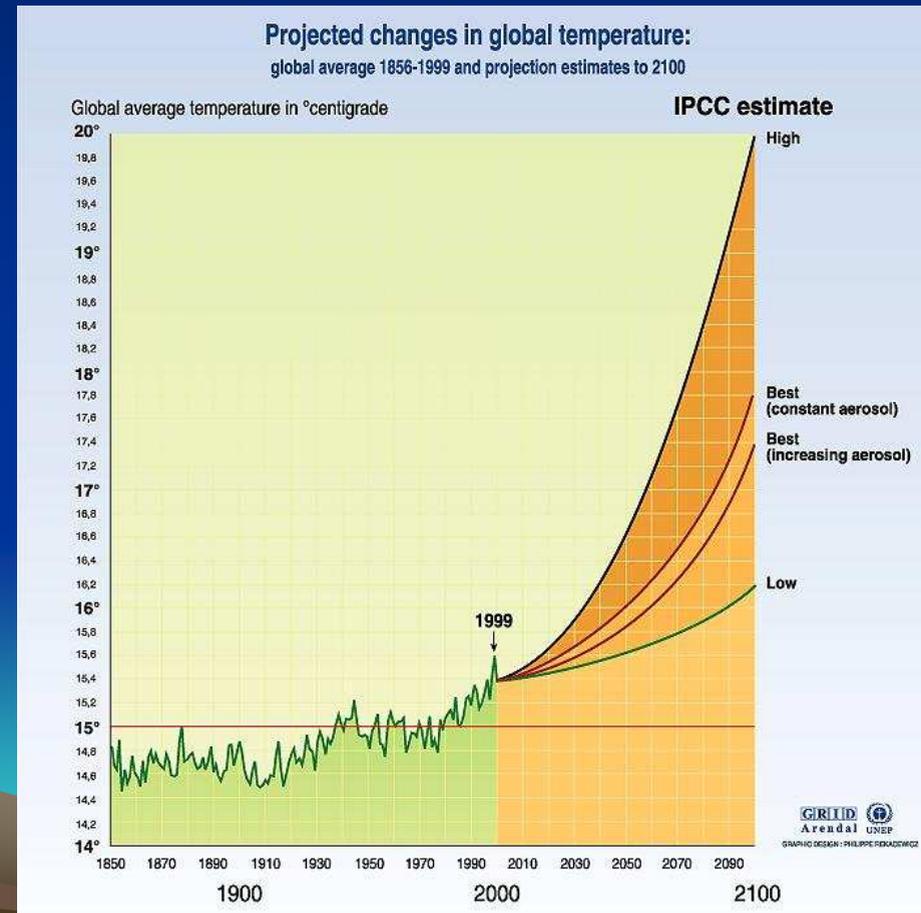
Sources: IPCC 1990, 1995, 2001

Sea level Rise:

- 20th cent.: **+0,1-0,2 m**
- 21st century: **9-88 cm**



Source: School of environmental sciences, climatic research unit, university of East Anglia, Norwich, United Kingdom, 1999.



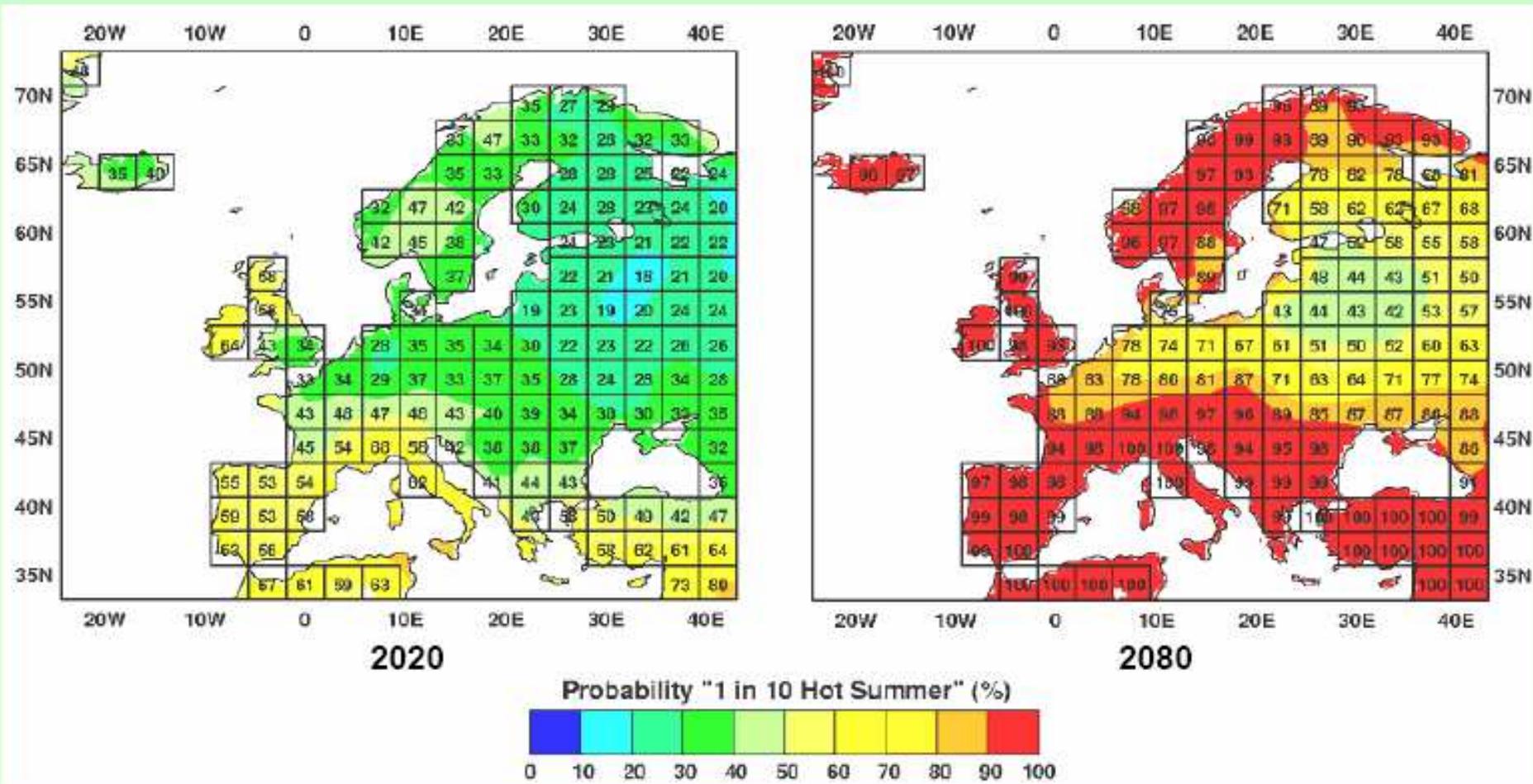
Source: Temperatures 1856 - 1999. Climatic Research Unit, University of East Anglia, Norwich UK. Projections: IPCC report 95.

4.2. Climate Change Poses Environmental 'Threats', 'Challenges', 'Vulnerabilities' and 'Risks' for National and Human Security

Environmental causes, stressors, effects & natural hazards pose	Natural and economic factors		Societal impact factors (exposure)	
	Substantial threats for	Challenges affecting	Vulnerabilities for	Risks for
	Security objects (for what or whom?)			
Climate change - temperature increase (creeping, long-term)	- Human health - agriculture (yield decline) - biodiversity - desertification	- tourism - food security - fisheries - government action - econ. action	- infect. disease - damage to crops - natural systems - water scarcity - forest fire	- human populations - the poor, old people and children due to heat waves
Climate change - sea level rise (creeping, long-term)	- Small island states - marine ecosystem, - indigenous communities, - industry, energy	- deltas - coastal zones - marine, freshwater ecosystems	- coastal cities, habitats, infrastructure, jobs - cities, homes, jobs	- livelihood - poor people, - insurance, - financial services

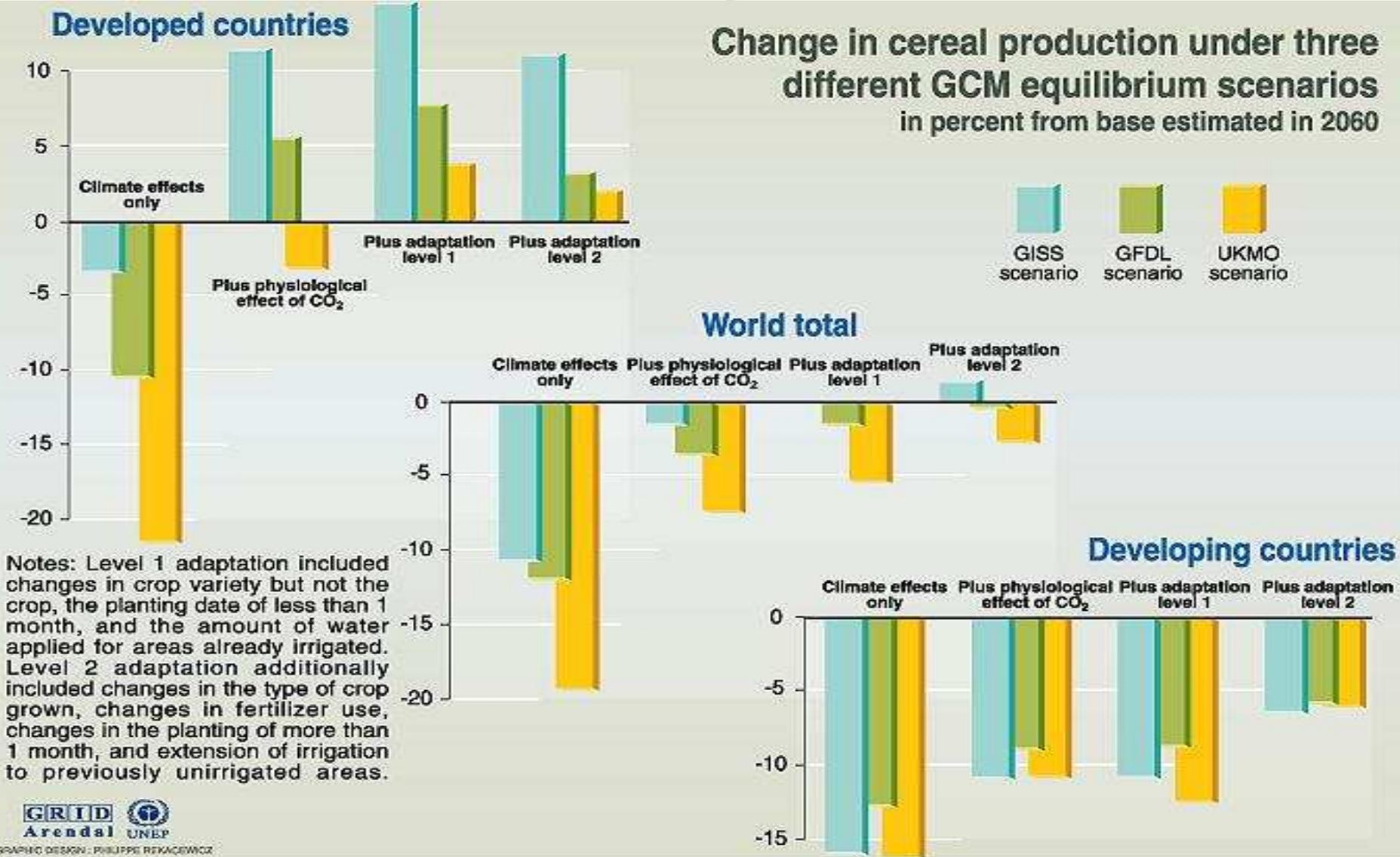
4.3. Change in Probability of Hot Summers, 2020 and 2080. Source: M. Parry, Meeting of EU Agriculture & Environment Ministers, 11.9.2005, London

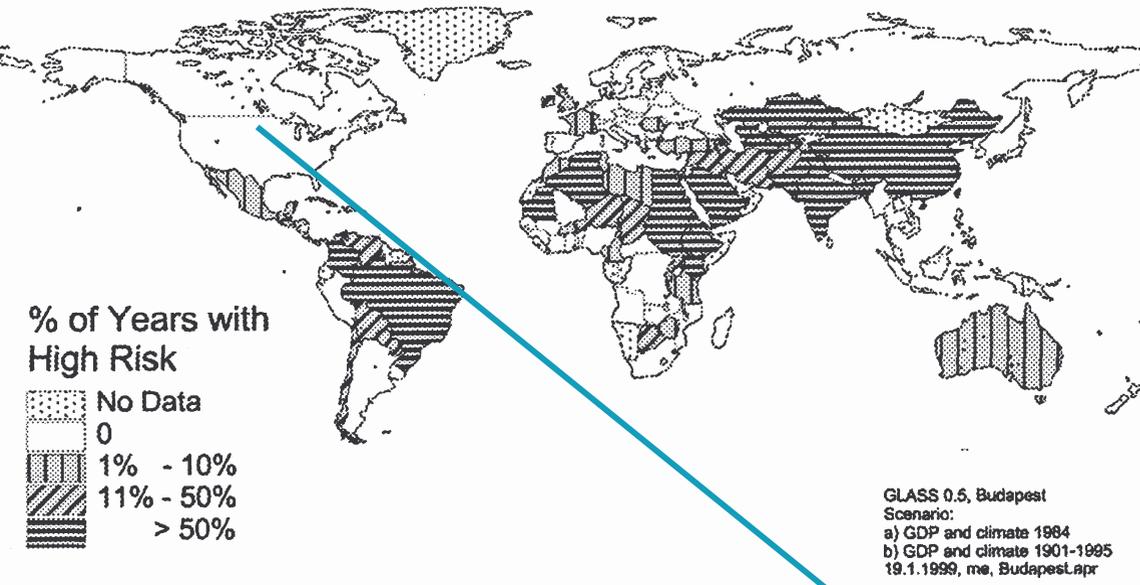
A2



4.4. Climate Change Impacts on Agriculture

Source: © UNEP; GRID Arendal





← High Potential for Food Crisis (1901-1995)

© Alcamo/Endejan 2002: 143

Figure 4. High Potential for Food Crisis 1901-1995.

4.5. Food Crises High Potential for Food Crisis (2001-2050) with GDP and Climate Change →

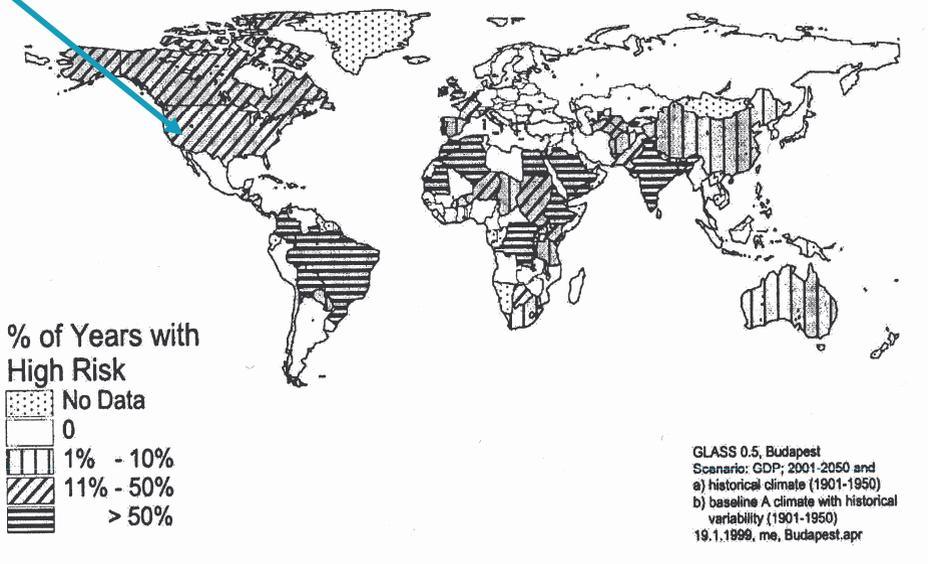
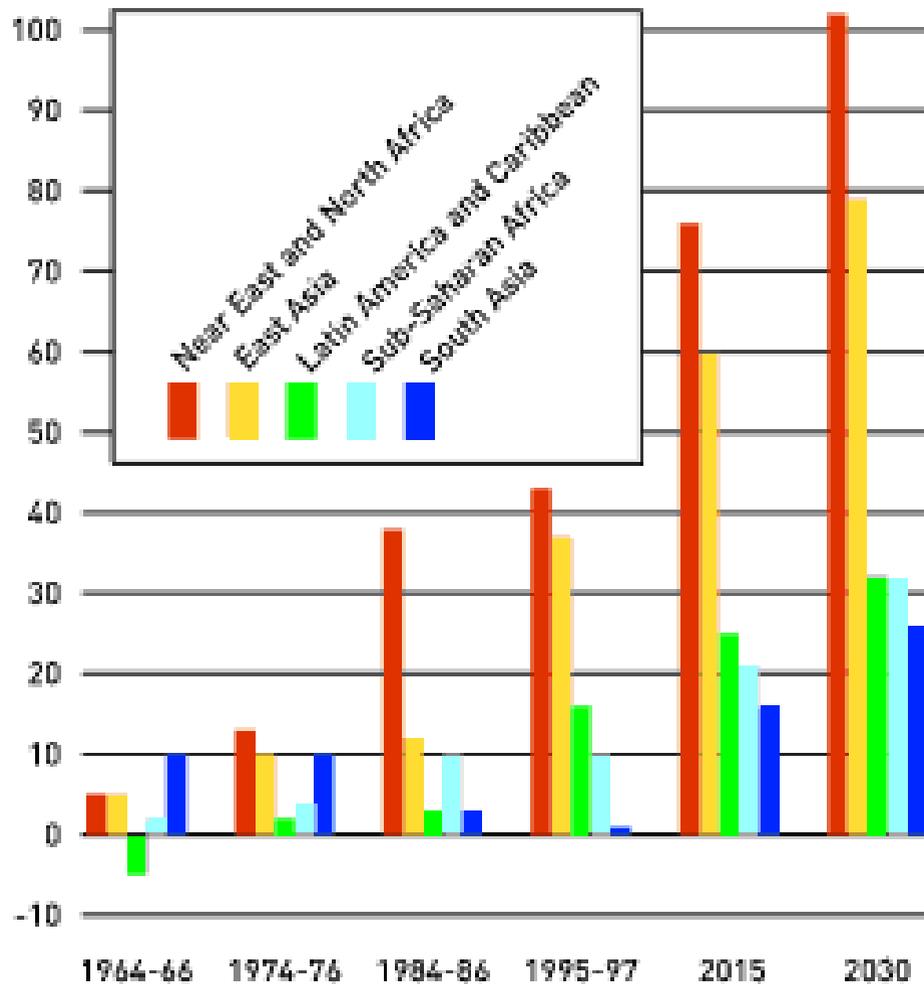


Figure 6. High Potential for Food Crisis 2001-2050 – with GDP Increase and Climate Change.

4.6. FAO (2000) Increase in Cereal Imports

Net cereal imports in developing countries

millions of tonnes



- **FAO: 4 March 2003, Rome** World's population will be better fed by 2030, but hundreds of millions of people in developing countries will remain chronically hungry.
- Number of hungry people will decline from 800 million today to 440 million in 2030.
- The target of the World Food Summit (1996) to reduce the number of hungry by half by 2015, will not be met by 2030.

4.7. Climate Change: A New National “Security”

Challenge? Climate change may spark conflict

- Britain's Defence Secretary, John Reid, pointed to violent collision between a rising world population & shrinking world water resource: global warming. **Climate change may spark conflict between nations and British armed forces must be ready to tackle violence.**
- He forecast that violence and political conflict would become more likely in the next 20 to 30 years as **climate change turned land into desert, melted ice fields and poisoned water supplies.**
- He ... listed **climate change alongside the major threats .. in future decades, incl. terrorism, demographic changes, global energy dem.**
- He warned of increasing uncertainty about the future of the countries least well equipped to deal with **flooding, water shortages and valuable agricultural land turning to desert.**
- „We see uncertainty growing ... about the **geopolitical and human consequences of climate change.** **Impacts such as flooding, melting permafrost & desertification could lead to loss of agricultural land, poisoning of water supplies & destruction of economic infrastructure.**
- **“More than 300 million people in Africa currently lack access to safe water; climate change will worsen this dire situation.”**

4.8 Climate Change Poses

Threats, Challenges, Vulnerabilities & Risks for Human, National, Food & Health Security

- **Globally: past trends & future projections**
 - Temperature increase and change in precipitation
 - Increase in both flash floods & droughts
 - Hazard impacts depend also on social vulnerability and resilience
 - Response requires both protection & empowerment of the people
- **Regionally for South & Southeast Asia**
 - potential increases in flash floods & drought
 - Impact on decline in crop yields (food security)
- **Climate Change Impacts on Human Security**
 - Increase in temperature (flash floods & droughts) & sea level rise poses a +
 - „survival dilemma“ for affected poor people in the South:
 - a) to stay at home and to protect property (women, children, old p.)
 - b) to leave their home and to move to mega cities (metro poles)
 - c) to fight for the access to water (nomads in Sahel countries)
- **Conceptual Response is HUGE (U. Oswald Spring, Mexico)**
 - Human, Gender and Environmental Security
 - a) to cope with survival dilemma of the victims of Global Environm. Change
 - b) to develop survival strategies

5. Effect: Environmental Scarcity, Degradation & Stress

Four Phases of Env. Sec, Research since 1983

First Phase: Conceptual Phase: Concept Environmental Security

Second Phase: Empirical Phase: Case studies: Scarcity - Conflict

➤ Toronto: Homer-Dixon: since 1991: 3 Projects (figure © Homer-Dixon 1998)

➤ Zürich/Bern: Günther Bächler, K. Spillmann: environm. scarcity & degradation

Third Phase: Manifold Research without Integration (1995 - pres.)

Fouth Phase: Focus: interaction of environmental scarcity, degradation & stress

Sources of environmental scarcity

Social Effects

Decrease in quality and quantity of renewable resources

Population growth

Unequal resource access

Increased environmental scarcity

Migration, expulsion

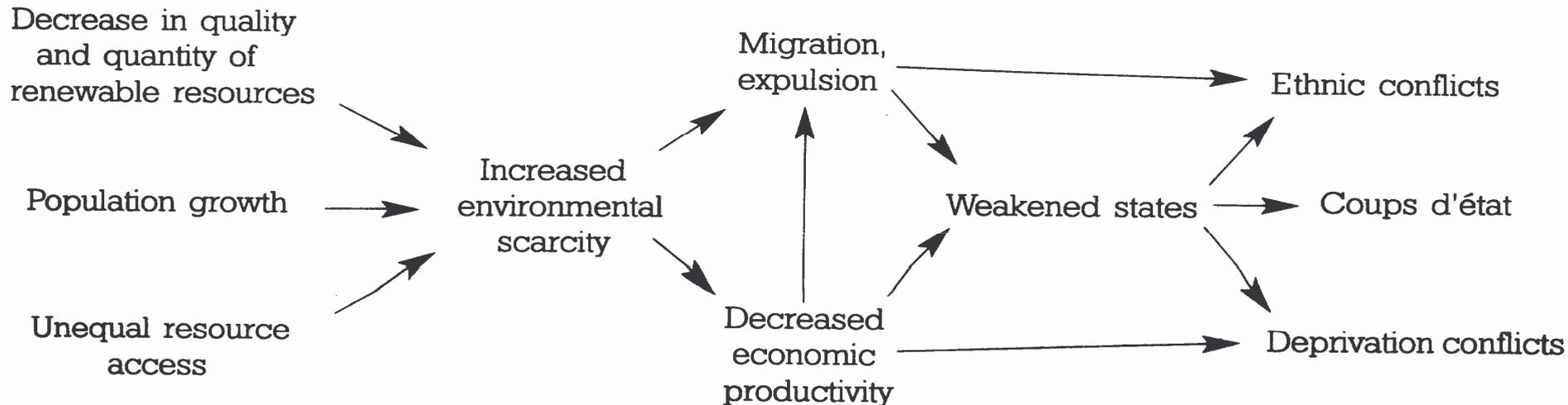
Decreased economic productivity

Weakened states

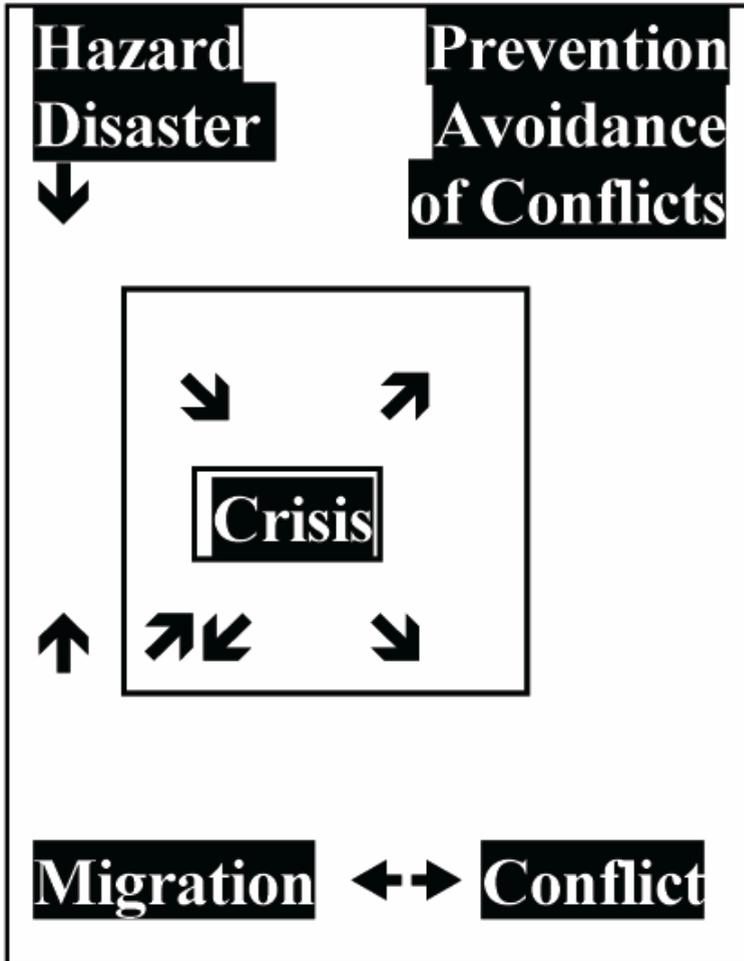
Ethnic conflicts

Coups d'état

Deprivation conflicts



6. Global, Regional, National Impacts: Human-Induced Natural Hazards Drought, Famine and Societal Consequences



Much knowledge on these factors:

✓ Drought, migration, crises, conflicts
Lack of knowledge on linkages among **fatal outcomes**

- Drought & drought-ind. migration
- Famine & environm.-ind. migration
- Conflicts & conflict-induced migration

Lack of knowledge on **societal consequences**: crises/conflicts

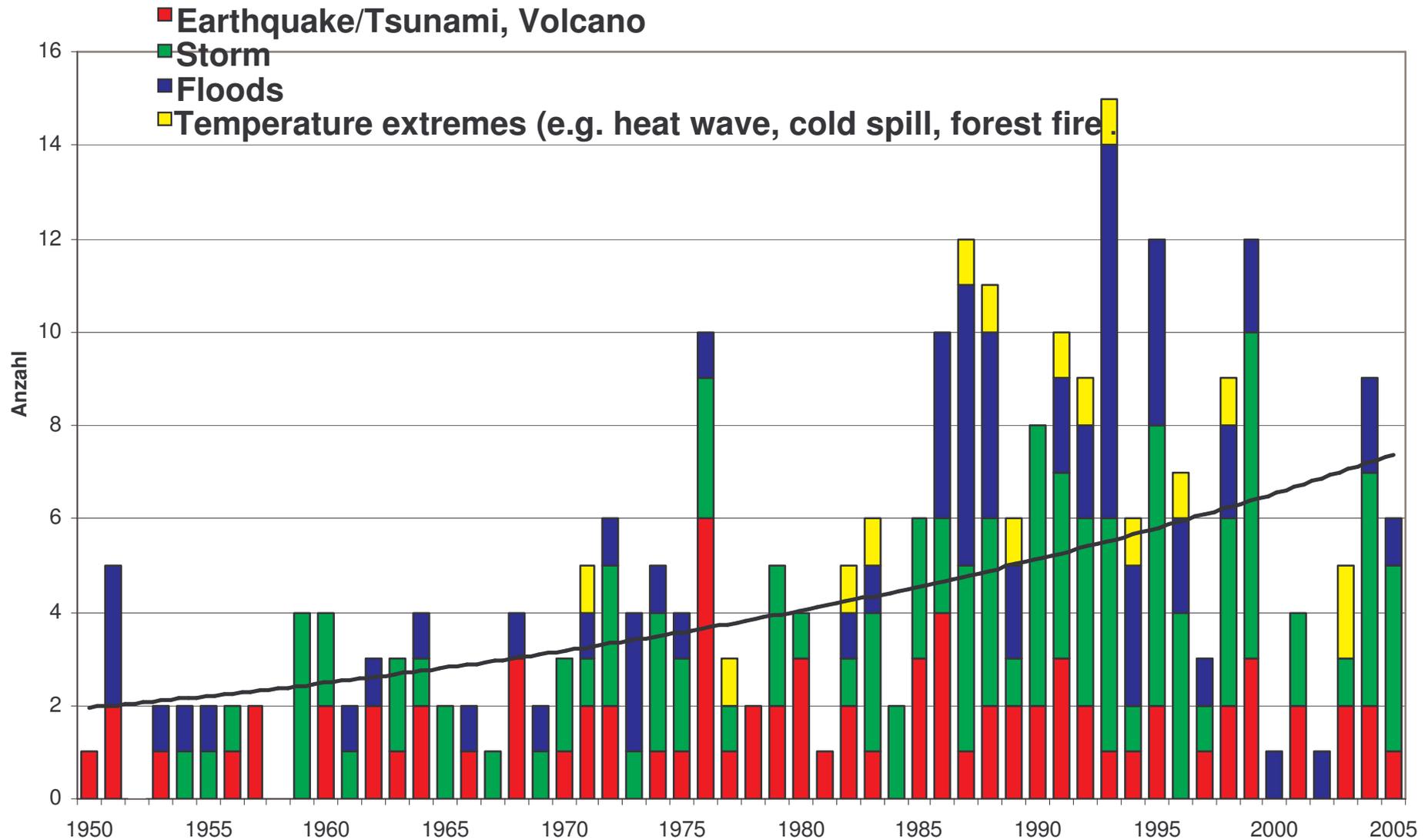
- Domestic/international crises/conflicts
- Environmentally or war-induced migration as a cause or consequence of crises and conflicts

6.1. Societal Outcomes: Knowledge on Linkages of Outcomes

- **What are consequences of climate change, desertification and water scarcity for:**
 - Environmental scarcity
 - Environmental degradation
 - Environmental stress?
 - **What are indirect Societal Outcomes of:**
 - Human-induced hydro-meteorological natural hazards (Storms, floods, landslides, drought) due to natural variability & increase due to climate change?
 - For migration, societal crises and domestic and international conflicts?
- 

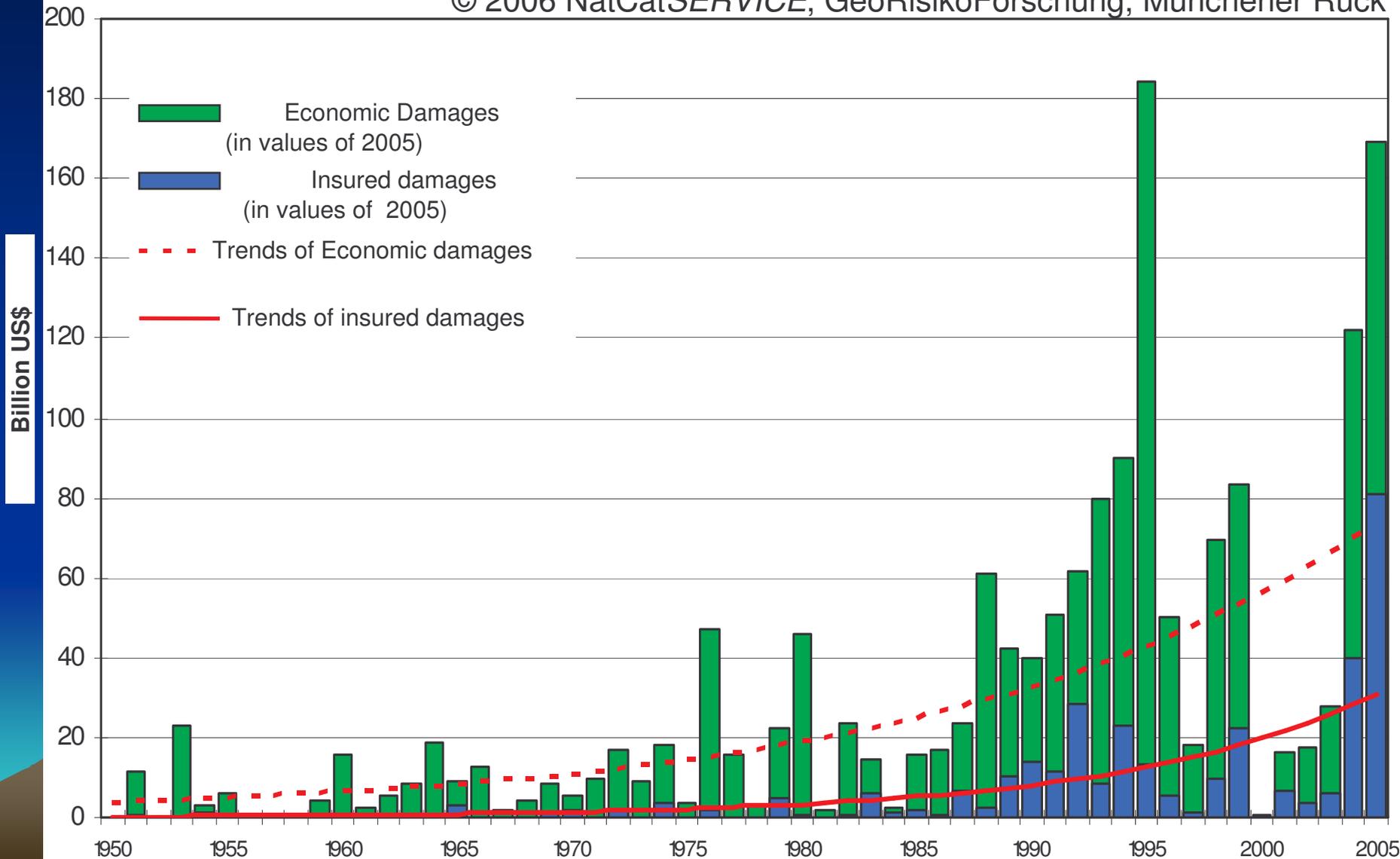
6.2. Global Impacts: Major Natural Disasters 1950 – 2005. Source: MunichRe, 2006

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

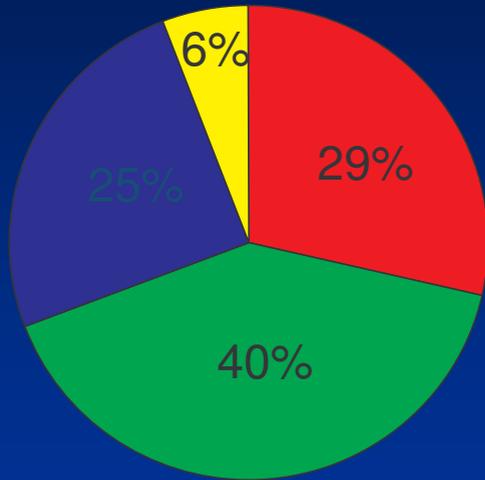
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6.4. Major Natural Hazards (1950-2005).

Source: Munich Re Research Div., 2006

267 Events



Geological events

Earthquake/Tsunami, Volcano

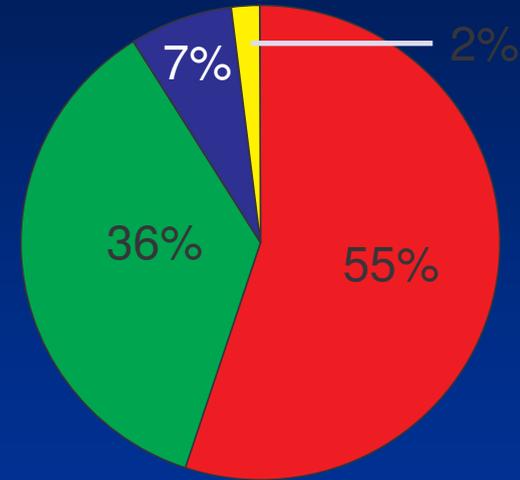
Weather-related events

Storm

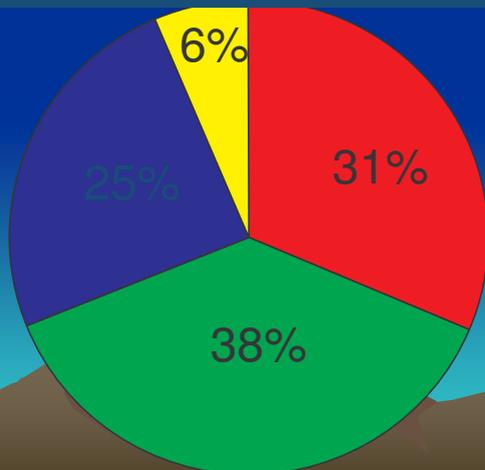
Floods

Extreme temperatures

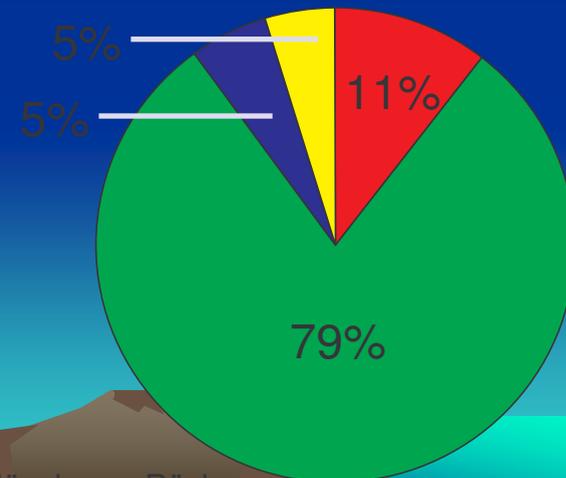
1,75 Million Dead



Economic damage: 1.400 billion US\$



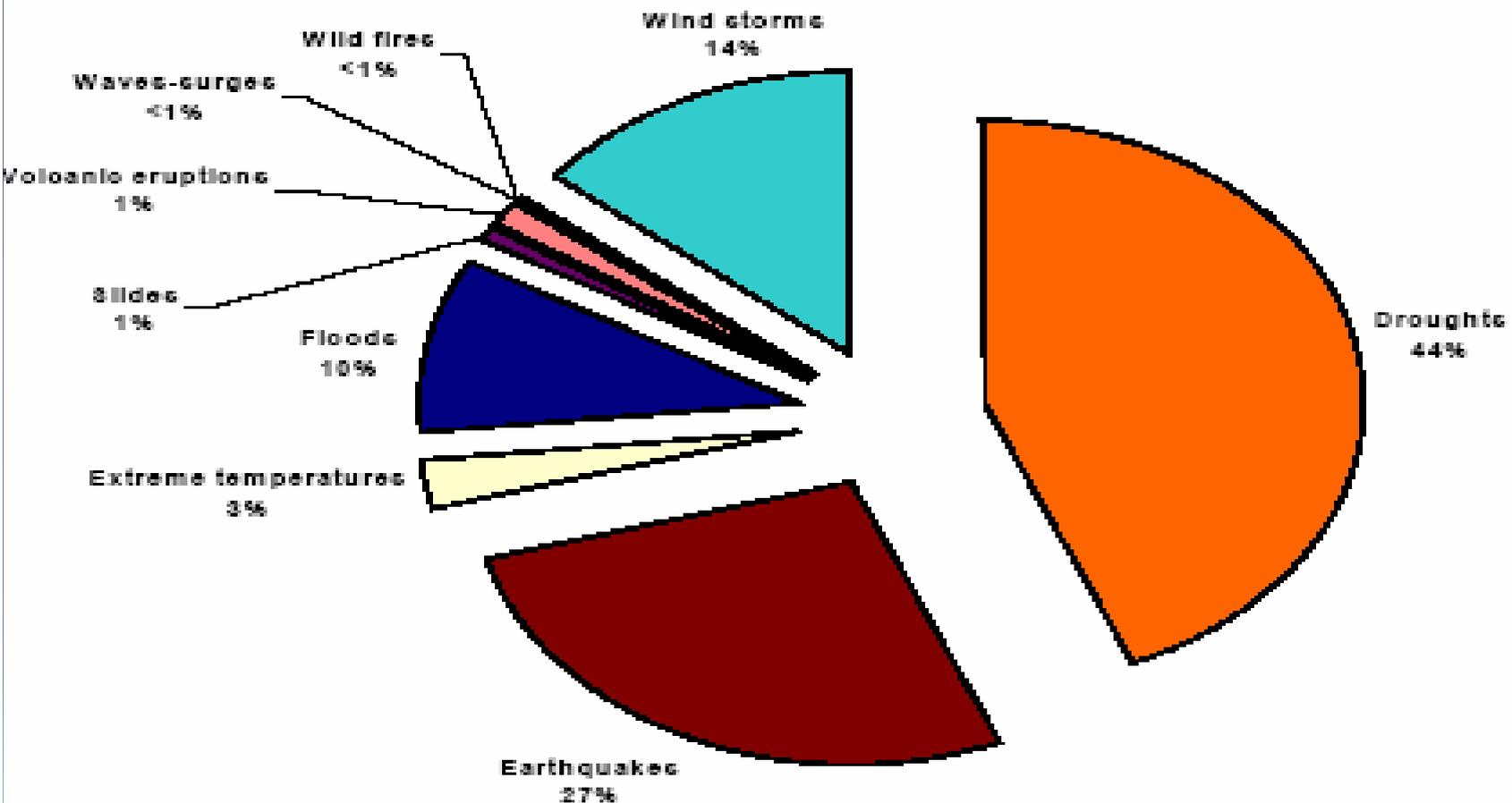
Insured damage: 340 billion US\$



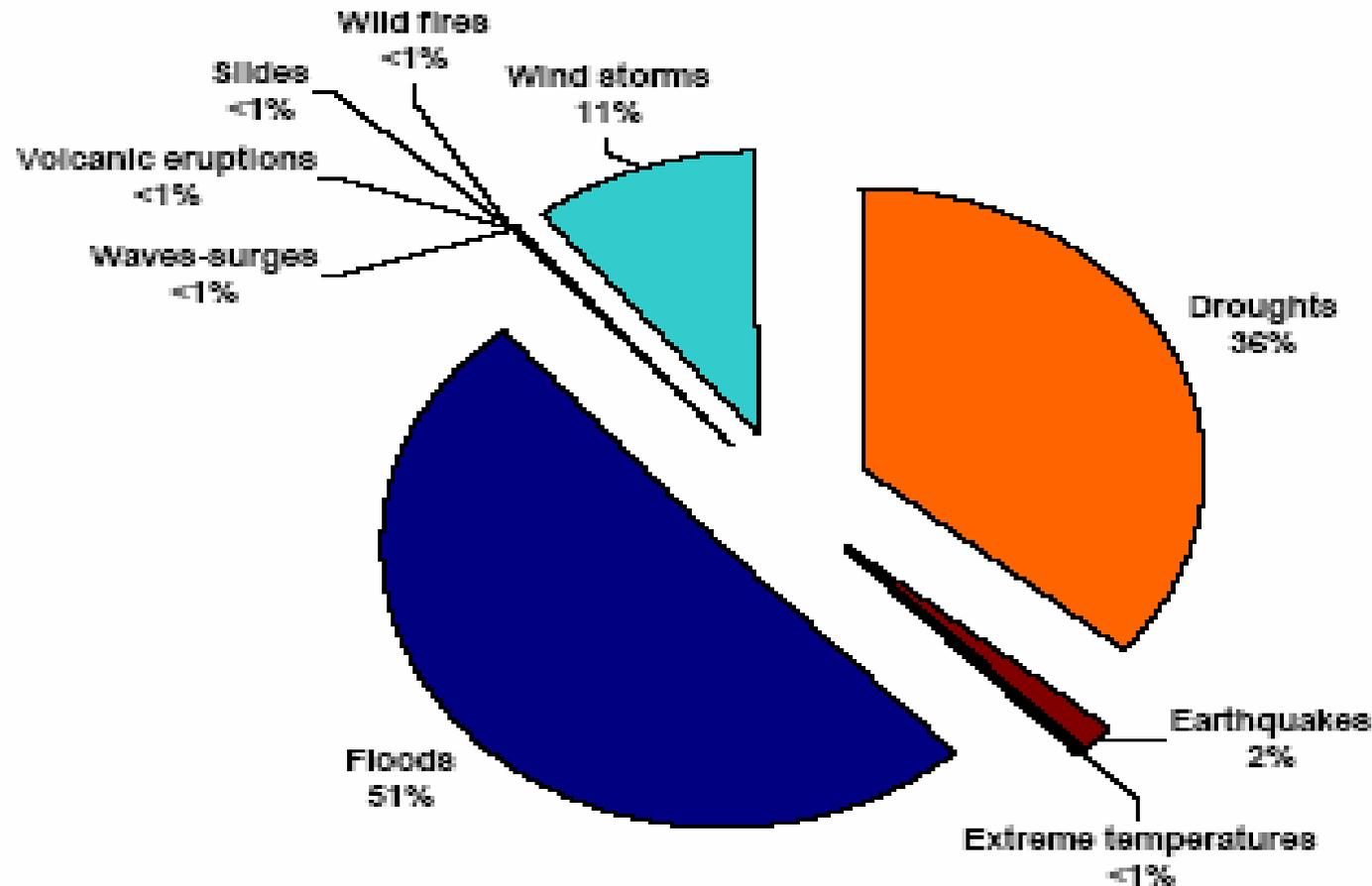
*in Werten von 2005

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



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



(1) injured + homeless + affected



6.7. Natural Hazards in Thailand

(Source CRED: number of people killed)

Disaster	Date	Total Killed
Wave/Surge (Tsunami)	26-Dec-2004	8,345
Wind Storm	27-Oct-1962	769
Flood	19-Nov-1988	664
Wave/Surge	June 1955	500
Wind Storm	3-Nov-1989	458
Flood	3-Jan-1975	239
Flood	8-Sep-1995	231
Flood	28-Oct-1995	200
Flood	Oct-2002	154
Flood	8-Aug-2001	104



6.8. Natural Hazards in Thailand (Source CRED: number of people affected)

Disaster	Date	Total Affected
Drought	Jan-1999	6,000,000
Flood	Jun-1996	5,000,000
Drought	Feb-2002	5,000,000
Flood	8-Sep-1995	4,280,984
Flood	Oct-2002	3,289,420
Flood	3-Jan-1975	3,000,093
Drought	Mar-1991	2,500,000
Flood	Jul-2000	2,500,000
Wind Storm	17-Aug-1991	1,894,238
Flood	Aug-1978	1,628,400

6.9. Natural Hazards in Thailand

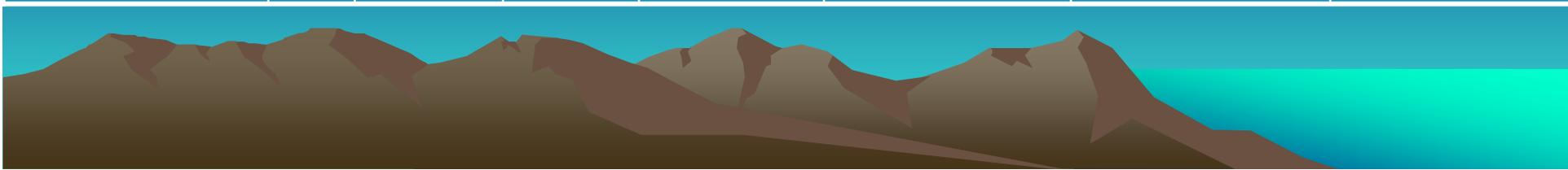
(Source CRED: Economic damage costs)

Disaster	Date	Damage US\$ (000's)
Flood	27-Nov-1993	1,261,000
Wind Storm	3-Nov-1989	452,000
Drought	Jan-2005	420,000
Wave/Surge (Tsunami)	26-Dec-2004	405,200
Flood	Dec-1993	400,100
Flood	400,100	400,000
Flood	19-Jan-1984	400,000
Flood	28-Oct-1995	400,000
Flood	31-Oct-1993	319,850
Flood	Jul-1994	238,000

6.10. Summarized Table of Natural Disasters in Thailand (1955-2005)

Source: EM-DAT, CRED, Univ. of Louvain, Belgium

	# ev.	Killed	Injured	Homeless	Affected	Total affected	Damage US (,000)
Drought	5	0	0	0	13,500,000	13,500,000	424,300
Earthquake	1	0	0	0	0	0	0
Epidemic	5	212	0	0	4,765	4,765	0
Floods	49	2,503	4,085	163,283	27,277,515	27,444,883	4,598,651
Slides	2	42	5	0	750,100	750,100	0
Wave/Surge Tsunami	4	8,876	8,457	200	58,550	67,207	405,467
Wind Storm	25	1,478	20	108,137	3,063,248	3,171,405	674,539



6.11. Global & National Trends: Climate Change and Climate-included Hazards

Due to climate change model projections:

- Average temperature will rise**
- Sea-level will rise**
- Hydro-meteorological events increase in number and economic damage**

But number of victims & affected depends on:

- Degree of social vulnerability**
- Economic resources & level of poverty**
- Empowerment, resilience of affected people**

7. Policy Response: Reducing Social Vulnerability & Building Resilience

- **To environmental scarcity, degradation & stress:**
 - **Proactive climate policy:** reduce greenhouse gases by shifting to nonfossil energy resources, especially renewables
 - **Combat desertification and soil erosion:**
 - **Cope with water scarcity & degradation** by demand-side management and alternative supply (desalination with renewables)
 - **Cope with population growth, rural emigration and urbanisation**
 - **To extreme outcomes of GEC, hydro-meteorological hazards & severe societal consequences:**
 - Reducing the hazard impact by enhanced early warning against multiple hazards and reducing social vulnerability by improved resilience
 - Improved policy of conflict resolution, prevention and adaptation and mitigation against challenges of GEC that may lead to conflicts (anticipatory learning & conflict avoidance)
- 

7.1. Simultaneously Addressing: Poverty and Violence with Hazard Impacts

- **4 pillars of human security address 4 related policy goals:**
 - Freedom from fear: „violence“, conflicts & wars and the means to fight them, small & light weapons
 - Freedom from want: „poverty“, basic human needs
 - Freedom to live in dignity: „good governance“ and „human rights“
 - Freedom from hazard impacts: „social vulnerability“ and „resilience“
- **Policy strategies to address simultaneously: violence, poverty, human rights and hazard impacts**
 - Violence in local, regional, national and international conflicts
 - Violence in complex emergencies where a hazard impacts on a conflict region: e.g. Vulcano in Goma, tsunami in Sri Lanka and Aceh
 - Where hazards cause, trigger, intensify or influence violent conflicts
 - These may be considered on the agenda of the Human Security Network

7.2. Human Security Commission: Aiming at Protection & Empowerment

- **Protection: key role of the state**
 - Reducing physical vulnerability: shelters, dams etc.;
 - Building infrastructure;
 - Early Warning;
 - Disaster preparedness and rapid response.
- **Empowerment: role of the state and people**
 - Reducing social vulnerability, e.g. habitats in hazard prone regions;
 - Local knowledge;
 - Citizens' participation;
 - Training and preparedness of residents.

8. Policy Task: Strengthening Human Security as „Freedom From Hazard Impact“

Bogardi/Brauch (2005): focus on the env. dimension of human security by trying

- to mainstream both,
- to contribute to the fourth phase of the environmental security debate,
- to develop a new pillar of the HS concept as “freedom from hazard impact”
- to strengthen prospects of a learning society & for improved human security.

This requires mainstreaming efforts on scientific and political tracks on:

- **environmental dimension of human security** (conceptualisation in scientific community),
- **a “paradigm shift” within the UN System** from national towards a human security per-spective on environmental threats, challenges, vulnerabilities and risks (Brauch 2005).

For international organisations, a dual mainstreaming may be needed:

- **to incorporate a “human security” perspective into “environmental security initiatives”,**
 - ENVSEC process of OSCE, UNEP, UNDP, and NATO
 - into the “green diplomacy” of the European Union launched at EC in Thessaloniki in June 2003; and,
- **to add a “environmental security dimension” on the agenda of the HSN**
 - with a special focus on complex emergencies
 - where violent conflicts and hazard impacts interact.

8.1. Towards a Fourth Phase of Environmental Security Research

Future research should combine: structural factors of GEC with extreme outcomes and conflict constellations.

A fourth phase of social science research may aim at the following ten conceptual and policy goals:

–Scientific Orientation and Approach

- Grotian perspective, political geo-ecology, human security focus,
- Coping with Security Dilemma (states) and Survival Dilemma (human beings)
- Dual goal: Sustainable development & sustainable peace

–Scientific Focus on Causes, Impacts & Extreme Outcomes of Global Environmental Change

- Causes, outcomes., policy process, regional perspective

–Policy Goals:

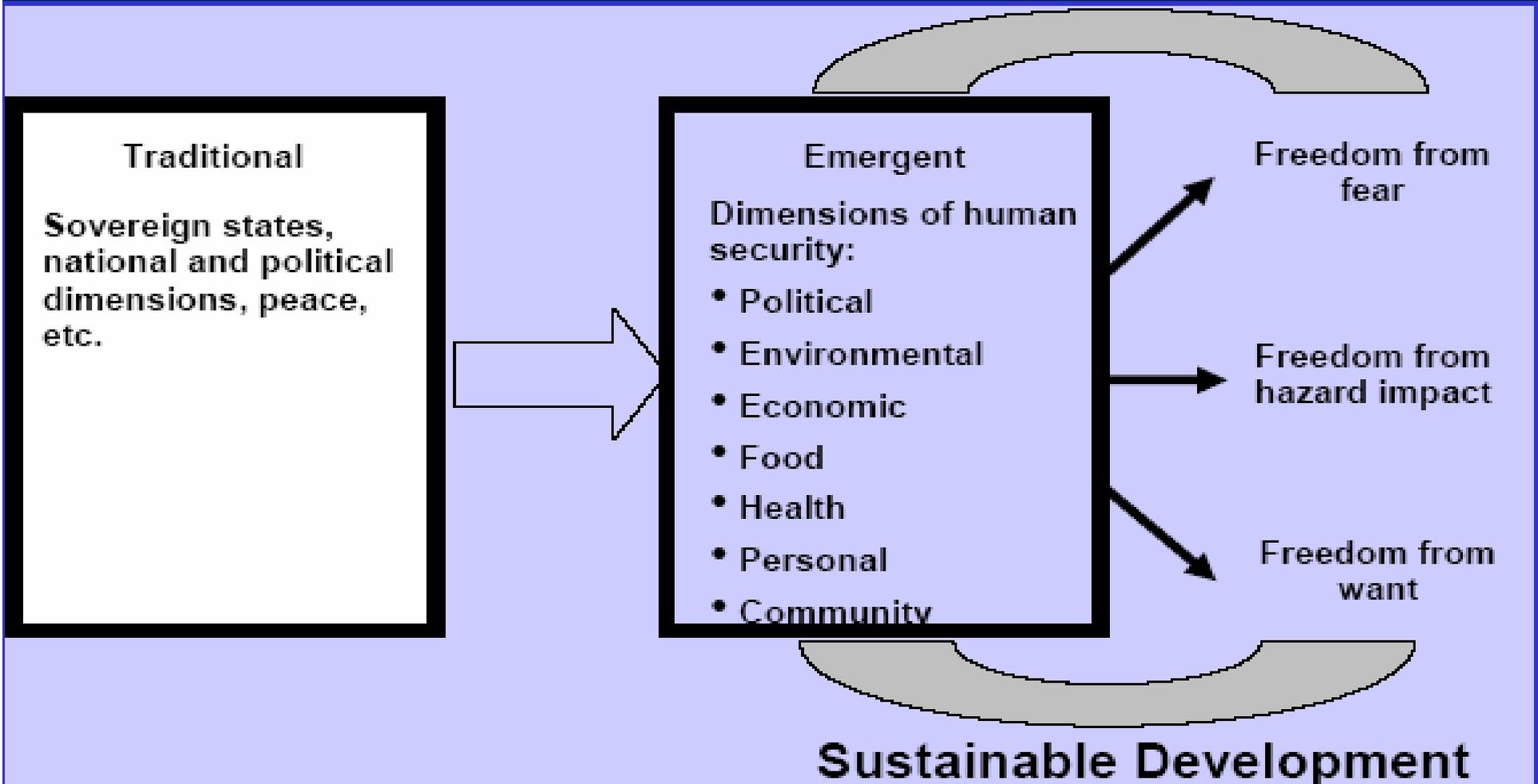
- ***Policy Goals on Societal / Individual Level:*** ESS studies should foster strategies
 - reducing the *impact* of environmental stress,
 - decreasing the *vulnerability* & strengthening coping capacities & *resilience*.
- ***Policy Goals on Communal, Sub-national, National and International Level:*** Strategies for coping with outcomes of environmental stress should be developed by
 - **improving disaster preparedness and response and by**
 - **integrating disaster reduction into development planning.**
 - **Resolution, prevention & avoidance of violence should become a major policy goal.**

8.2. Towards a Fourth Pillar of Human Security as Freedom from Hazard Impact

- Conceptual and policy task for UNU-EHS: to develop human security as “freedom from hazard impact”, contribute to it through capacity-building for early warning, vulnerability indicators, & mapping.
- Natural hazards cannot be prevented, but their impact can be reduced by early warning and better disaster preparedness.
- “Freedom from hazard impact” implies that people can mobilise their resources to address sustainable development goals rather than remain in the vicious cycle of the survival dilemma.
- “freedom from hazard impact” requires hazard specific policies & combination of technical, organisational and political measures for:
 - *Slow-onset hazards*: sea-level & temperature increase (climate change)
 - *Rapid-onset hydro-meteorological hazards*:
 - *Rapid-onset geophysical hazards*: earthquakes, tsunamis
 - *Man-made disasters*: technical, organisational, political

8.3. Achieving Human Security through Freedom from Fear, Want & Hazard Impact

Source: J.Ganoulis, UNESCO Chair INWEB, Greece based on Brauch, UNU-EHS (2005, 2005a)





UNITED NATIONS
UNIVERSITY

UNU-EHS

Institute for Environment
and Human Security

8.4. Research Goals of UNU-EHS

Flood Plains and Deltas/Droughts

Urban

Rural

**Vulnerability
Assessment
as Part of
Early Warning**

**Internat. Flood
Initiative Prog.
(IFI/P)**

**Voices of Human
(In) Security**

**Capacity Building
(coping capacity)**

**Awareness Raising:
Hazards-Risks-
Vulnerabilities-
Sustainable
Development**

9. Conclusions and Suggestions for Research & Policy

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 outstretched and therefore operationally unfeasible.

9.1. Complex Emergencies

Co-existence of hazards & conflicts: a challenge for international and humanitarian organizations

- Tsunami impacted on two conflicts: Aceh & Sri Lanka
- Kashmir Earthquake (2005) impacted on conflict region
- Drought in Sahel zone has triggered small-scale violence
- Earthquake (1985) in Mexico has led to political reform

Complex Causal Linkages

- Existing conflicts increase the social vulnerability to hazards
- Severe hazards may cause disasters, migrations, crises & conflicts
- Two sides of environmental security: environmental conflict vs. peacemaking?

No Joint Dialogue and Research between two Early Warning Communities on Hazards and Conflicts

- Two parallel approaches has operational consequences for customers
- Humanitarian Organisations: IFRC-RCS has to deal with both

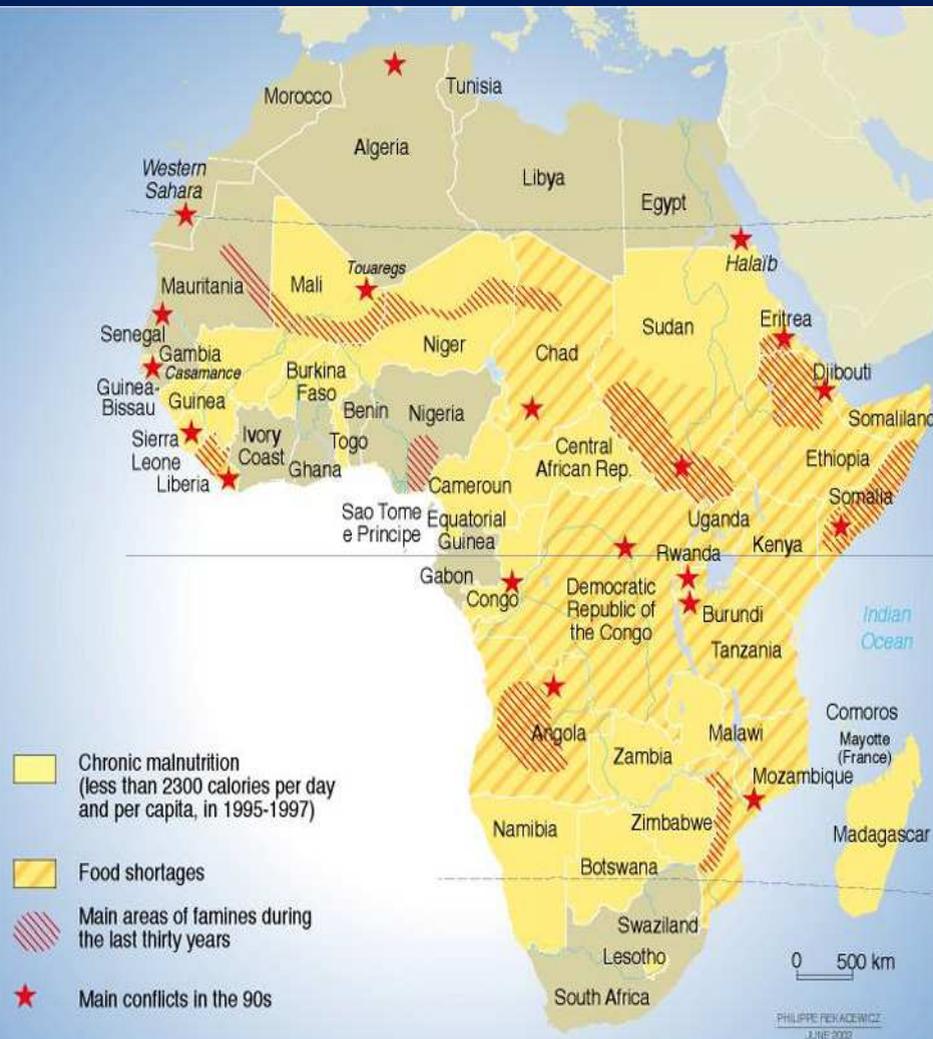
9.2. Hazards as a Cause of Conflict

Coincidence between famine areas & conflicts

Sudan: coexistence of all problems: disasters, internal displacement, refugees and conflict

- **Famines, political unrest, and civil wars occur simultaneously in same countries & regions**
- **Migration: rapid spread of diseases, especially AIDS.**

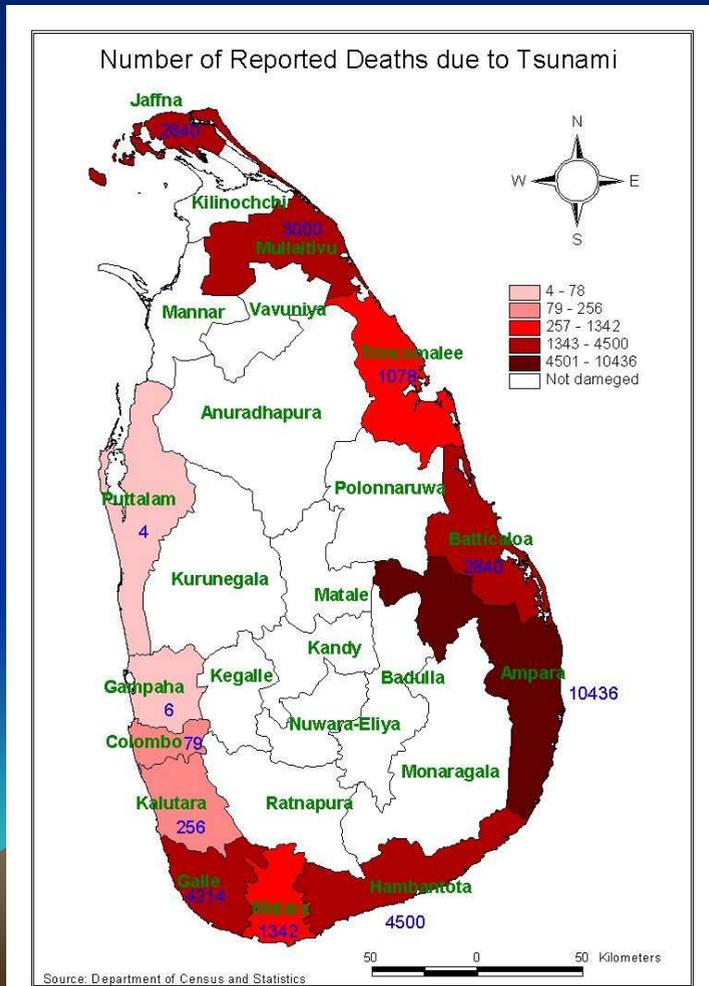
➤ **Social science research is needed on links among extreme & fatal out-comes: drought, famine, migration, crises & conflicts.**



9.3. Impact of Hazards on Conflicts

Sri Lanka:

Conflict unresolved, may intensify, disaster aid as a cause of conflict?



Aceh: Post-Tsunami Peace?

EU Commission as a peacemaker
Aceh (Sumatra) fighting for 30 years.
2004: Most victims of Tsunami in Aceh
15 August 2005: Indonesian government & rebels from the Free Aceh Movement (Gam) have signed a peace deal aimed at ending their conflict

9.4. Two Early Warning Communities

No Dialogue and Scientific Cooperation between two Early Warning Communities

- **Early Warning of Hazard & Disaster Community**

- **Hazard Early Warning Community**

- Science: Many
- Practice: UN-OCHA, ECHO, DG Env., Civil Protection
- Networks: Provention Consortium (Geneva, IFRC)

- **Early Warning Conferences in Potsdam (1998), Bonn (2003, 2006)**

Users

- GEC & Geoscience Community
- UNISDR, UNDP, UNEP/DEWA
- UN-OCHA, ECHO, IFRC/RCS
- EU DG Dev., ECHO, DG Env., Civ.Prot.

- **Early Warning of Hazards**



Early Warning of Crises & Conflict Community

- International Crisis Group: Crisis Watch Database
- Swisspeace: FAST
- SIPRI: Early Warning Indicators
- CEWARN: Conflict Early Warning & Response Mechanism
- Carleton University: Country Indicators for Foreign Policy

Users

- UNSG: Dep. for Peacekeeping
- UN-OCHA, ECHO, IFRC/RCS
- EU DG Relex (Conflict Prevention, crisis management, green diplomacy)



Early Warning of Crises Conflict

Joint Customer: Humanitarian Community: OCHA, ECHO,
International Red Cross and Humanitarian Aid Groups

9.5. Need for Mainstreaming of Early Warning of Hazards & Conflicts

- **Early Warning of Hazards and Disasters**
 - Earthquakes & Tsunamis: Charter
 - Floods & Storms: Weather Services
 - Drought & Famine: FAO, WFP, USAID et al.
 - Disease, Pandemics: WHO & nat. agencies
- **Early Warning of Crises and Conflicts**
 - Refugees, Internal Displacement & Migration: UNHCR, IOM
 - Crises: press, research, intelligence agencies
 - Conflicts: press, research, intelligence agencies

Advantages of linking early warning on disasters & conflicts

- ❖ **Successful early warning of hazards will also mitigate conflicts**
- ❖ **Successful early warning of conflicts will reduce vulnerability to hazards**
- ❖ **Scientific dialogue and political cooperation is needed**

9.6. From Research to Action: Enhancing Environmental & Human Security Towards Environmental Conflict Avoidance

- **Primary Goal:** address fatal outcomes of GEC: hazards and disasters, migration, crises & conflicts that may have been caused, triggered, induced, influenced by: a) environmental stress and b) extreme weather events,
- **Enhance Environmental Security:** Address human behaviour that contributes to GEC via climate change, soil degradation, water pollution & scarcity: sustainable strategies
- **Enhance Human Security:** address factors of GEC that challenge survival of individuals, families, villages, ethnic groups
- **Avoid Environmentally-induced Conflicts:** address structural or causal factors (of Survival Hexagon), e.g. climate policy, combat desertification, cope with water stress.

10. Human Security Network Members & Goals

NATO (4)	EU (6)	Third World (6)
Canada		Chile
Greece	Austria	Costa Rica
Netherlands	Ireland	Jordan
	Slovenia	Mali
Norway	Switzerland	Thailand (chair)
		South Africa (observer)

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

The Network emerged from landmines campaign at a Ministerial, Norway, 1999. Conferences at Foreign Ministers level in Bergen, Norway (1999), in Lucerne, Switzerland (2000), Petra, Jordan (2001) Santiago de Chile (2002), Graz (2003), Bamako, Mali (May 2004), Ottawa (2005)

Anti-pers. 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 educat., HIV/AIDS, implement. of intern. humanitarian & human rights law, conflict prevention

So far no environmental security issues on the agenda of this HS-Network.

10.1. Second Human Security Network Medium Term Workplan 2005 – 2008

Areas of Cooperation

- 1) Effective multilateral institutions
- 2) Human Rights
- 3) Protection of civilians „armed conflict“
- 4) *Small arms, light weapons, land-mines*
- 5) Women, Peace and Security
- 6) HIV-AIDS
- 7) **Poverty/People-centred Developm.**
 - Poverty & underdevelopment are a source of insecurity. Poor people are more exposed to a whole range of **vulnerabilities**, such as **exclusion, discrimination, human rights viol.**
 - Poor are more **vulnerable to political & economic emergencies & violence**; are powerless & lack necessary resources & access to critical life opportunities.
 - address challenges of securing basic human needs, linked to freedom from want and freedom to live in dignity, with a attention to empowerment measures.

7th Ministerial Meeting,
Ottawa, Canada, 18-20 May 2005



Guiding Principles

- **emerging threats to people's safety , security, well-being ;**
- identifying concrete areas for collective action on human security;
- promoting greater understanding of, and support for, human security issues;
- advancing human security issues at the regional level, through international negotiations & conf.

10.2. Concept paper of Thailand as chair of HSN: „*Human Agenda: Partnership for Human Security*”

1. GUIDING PRINCIPLES

- Continuity, Contribution, Constituency, Consistency

2. OBJECTIVES

- Effectiveness, Uniqueness, Visibility and Connectivity

3. APPROACH

- Thailand will take a holistic and balanced approach to human security that is based upon a realization of inter-linkages between freedom from fear and freedom from want as well as freedom to live in dignity.
- Thailand will avoid creating a hierarchy of issues bearing in mind different perspectives, interests and priorities of respective members. The issues will instead be grouped into 3 thematic clusters as follows:
 - (1) Poverty, development and HIV/AIDS
 - (2) Human Rights and Humanitarian Affairs
 - (3) **Emerging Issues**

4. PRIORITY ISSUES FOR THAILAND

- *As lead country:* HIV/AIDS , **People-centred development** , Trafficking in persons, especially women and children
 - *As partner:*
 - Landmines , Human Rights Education
- 

10.3. „Freedom from Hazard Impact“:

„Emerging Issue“ for „People-centred Development“

- As the only member of the HSN, Thailand was a victim of the Tsunami of 26 December 2006
- The Tsunami was the worst natural hazard in Thailand during the past 50 years.
- As an ASEAN Country Thailand is familiar with the complex emergency in Aceh, Sumatra.
- 22-24 May 2006: Thailand had worst flash flood in 60 years that affected more people than the Tsunami.
- Which lessons can be learned from this experience for a „people-centred development“ that reduces the impact of natural hazards by reducing social vulnerability and enhancing resilience?
- A new agenda item for the Human Security Network?

I thank the Foreign Ministry of Thailand for inviting me, for its hospitality and for giving me an opportunity to share with you my own emerging conceptual ideas.

Thank you for your attention and patience.

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http://www.afes-press.de/html/download_hgb.html

Send your comments to:

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