Los Quatros 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
1. Reconceptualisation of Security: Global Mental Mapping
2. Causes: Contextual Change of Global International Order
3. Four Pillars of Human Security:
   5. Freedom from Want: Human Security Commission
   6. Freedom to Live in Dignity
   7. Freedom from Hazard Impacts
8. Cooperative Strategies for Mexico in Dealing with Human Security Challenges
9. Conclusions
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?
- Reunification of Germany
- Enlargement of the EU

- New threats, challenges, vulnerabilities and risks?
- 9/11 attacks in 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

<table>
<thead>
<tr>
<th>Security dimension ⇒ ↓ Level of interaction</th>
<th>Military</th>
<th>Political</th>
<th>Economic</th>
<th>Environmental ↓</th>
<th>Societal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human individual ⇒</td>
<td></td>
<td></td>
<td></td>
<td>Food/health &amp; water sec.</td>
<td>Cause &amp; Victim</td>
</tr>
<tr>
<td>Societal/Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>⇧↑</td>
</tr>
<tr>
<td>National</td>
<td>In Cold War, US since 2001: Shrinking</td>
<td></td>
<td>Energy security</td>
<td></td>
<td>⇧↑</td>
</tr>
<tr>
<td>Internat./Regional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>⇧↑</td>
</tr>
<tr>
<td>Global/Planetary ⇒</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GEC</td>
</tr>
</tbody>
</table>
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 to live in dignity” (Kofi Annan in his report: In Larger Freedom (March 2005))

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

<table>
<thead>
<tr>
<th>NATO</th>
<th>EU</th>
<th>Third World</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td></td>
<td>Chile</td>
</tr>
<tr>
<td>Greece</td>
<td>Austria</td>
<td>Costa Rica</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Ireland</td>
<td>Jordan</td>
</tr>
<tr>
<td>Slovenia</td>
<td></td>
<td>Mali</td>
</tr>
<tr>
<td>Norway</td>
<td>Switzerland</td>
<td>Thailand</td>
</tr>
<tr>
<td></td>
<td></td>
<td>South Africa (observer)</td>
</tr>
</tbody>
</table>

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

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


- **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”

- **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
  - 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

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

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrometeorological</td>
<td>28</td>
<td>75</td>
<td>66</td>
<td>74</td>
<td>128</td>
<td>280</td>
<td>511</td>
<td>795</td>
<td>1575</td>
<td>2139</td>
<td>1444</td>
<td>7105</td>
</tr>
<tr>
<td>Geological</td>
<td>36</td>
<td>26</td>
<td>32</td>
<td>38</td>
<td>53</td>
<td>58</td>
<td>94</td>
<td>128</td>
<td>234</td>
<td>283</td>
<td>152</td>
<td>1134</td>
</tr>
<tr>
<td>Biological</td>
<td>5</td>
<td>12</td>
<td>10</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>40</td>
<td>65</td>
<td>167</td>
<td>351</td>
<td>297</td>
<td>956</td>
</tr>
<tr>
<td>Total</td>
<td>69</td>
<td>113</td>
<td>98</td>
<td>115</td>
<td>184</td>
<td>341</td>
<td>645</td>
<td>988</td>
<td>1976</td>
<td>2773</td>
<td>1893</td>
<td>9195</td>
</tr>
</tbody>
</table>

---

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

- Earthquake/Tsunami, Volcano
- Storm
- Floods
- Temperature extremes e.g. heat waves, cold spell, forest fire

Anzahl

Anzahl vs. Year
7.4. Major Natural Hazards (1950-2005), Economic and Insured Losses

© 2006 NatCatSERVICE, GeoRisikoForschung, Münchener Rück

Economic Damages (in values of 2005)
Insured damages (in values of 2005)

Trends of Economic damages
Trends of insured damages

Billion US$
7.5. Major Natural Hazards (1950-2005)

267 Events

- Geological events
  - Earthquake/Tsunami, Volcano: 29%
  - Volcanic eruptions: 6%
  - Extreme temperatures: 25%

- Weather-related events
  - Storms: 40%
  - Floods: 25%
  - High temperatures: 11%

1,75 Million Dead

- Geological events
  - Earthquake/Tsunami, Volcano: 7%
  - Volcanic eruptions: 2%

- Weather-related events
  - Storms: 36%
  - Floods: 55%

Economic damage: 1.400 billion US$

- Geological events
  - Earthquake/Tsunami, Volcano: 31%
  - Volcanic eruptions: 6%

- Weather-related events
  - Storms: 38%
  - Floods: 25%
  - Extreme temperatures: 5%

Insured damage: 340 billion US$

- Geological events
  - Earthquake/Tsunami, Volcano: 11%

- Weather-related events
  - Storms: 79%

* in Werten von 2005

© 2006 GeoRisikoForschung, Münchener Rück


### 7.8. Natural Hazards in Mexico

(Source: CRED: number of people killed)

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Date</th>
<th>Killed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquake</td>
<td>19-Sep-1985</td>
<td>9,500</td>
</tr>
<tr>
<td>Flood</td>
<td>1959</td>
<td>2,000</td>
</tr>
<tr>
<td>Volcano</td>
<td>1949</td>
<td>1,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>27-Oct-1959</td>
<td>960</td>
</tr>
<tr>
<td>Flood</td>
<td>12-Sep-1999</td>
<td>636</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>1-Oct-1976</td>
<td>600</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>28-Sep-1955</td>
<td>500</td>
</tr>
<tr>
<td>Earthquake</td>
<td>28-Aug-1973</td>
<td>500</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>12-Nov-1961</td>
<td>436</td>
</tr>
<tr>
<td>Extreme Temperature</td>
<td>30-Apr-1990</td>
<td>380</td>
</tr>
</tbody>
</table>
## 7.9. Natural Hazards in Mexico
(Source CRED: number of people affected)

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Date</th>
<th>Total Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquake</td>
<td>19-Sep-1985</td>
<td>2,130,204</td>
</tr>
<tr>
<td>Wind Storm: Rita</td>
<td>1-Oct-2005</td>
<td>1,954,571</td>
</tr>
<tr>
<td>Wind Storm: Wilma</td>
<td>19-Oct-2005</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>8-Oct-1997</td>
<td>800,200</td>
</tr>
<tr>
<td>Flood</td>
<td>12-Sep-1999</td>
<td>616,060</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>15-Jul-1976</td>
<td>300,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>1-Oct-1976</td>
<td>276,400</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>Aug-1967</td>
<td>271,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>Dec-1983</td>
<td>257,500</td>
</tr>
<tr>
<td>Flood</td>
<td>16-Sep-1993</td>
<td>231,290</td>
</tr>
</tbody>
</table>
### 7.10. Natural Hazards in Mexico
(Source CRED: economic damage costs)

<table>
<thead>
<tr>
<th>Disaster</th>
<th>Date</th>
<th>Damage US$ (000's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earthquake</td>
<td>19-Sep-1985</td>
<td>4,104,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>22-Jun-1993</td>
<td>1,670,000</td>
</tr>
<tr>
<td>Drought</td>
<td>May-1996</td>
<td>1,200,000</td>
</tr>
<tr>
<td>Flood</td>
<td>3-Sep-1998</td>
<td>602,700</td>
</tr>
<tr>
<td>Flood</td>
<td>12-Sep-1999</td>
<td>451,300</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>8-Oct-1997</td>
<td>447,800</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>24-Sep-2001</td>
<td>400,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>17-Jan-1988</td>
<td>250,000</td>
</tr>
<tr>
<td>Wind Storm</td>
<td>10-Oct-1995</td>
<td>241,000</td>
</tr>
<tr>
<td>Earthquake</td>
<td>15-Jun-1999</td>
<td>226,800</td>
</tr>
</tbody>
</table>
### 7.11. Summarized Table of Natural Disasters in Mexico (1929-2005)

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

- **Juan Mata (DG Research, Secretaría de Energía, 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**
Background

- 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 outstretched 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