Impacting health, the environment and global governance

The challenges of taking a security approach

Paris, 26 September 2008

Hans Günter Brauch

Environment and Security

A Historic Link

PD (Adj. Prof.), Free University of Berlin
Senior Fellow, Institute on Environment and Human Security of the United Nations University (UNU-EHS)
Peace Research and European Security Studies (AFES-PRESS)
Editor, Hexagon Series on Human, Environmental Security and Peace
1. Research Question & Outline

– Overview of environment and security linkages:
  - in history: international relations & international law
  - in recent (inter)national policy efforts to address environmental security issues (scarcity, pollution, GEC)

– Scientific analyses & discourses on linkages
  - Review: 3 phases of environment-security debate
  - Propose: fourth phase of research, specifically for the environmental dimension of human security

– Policy proposal for avoiding negative impacts
  - Old: ENVSEC for SE Europe, Caucasus, Central Asia
  - New: MEDHUMENSEC for North Africa & Middle East
2. Environment: Object or Cause of Conflict?

- Vietnam: Impact of Agent Orange
- Burning oil fields in Kuwait (1991)
- Oil spills at Lebanon Coast (2006)

- Climate Change Impacts: Hazards
- Drought and Forest Fires
- Flash Floods in Spain (2007)
3. Reconceptualization of Security & Analysis of E-S Linkages

Reconceptualization of Security since 1989: Response to contextual change: policy response & conceptual innovation

- **Securitzation theory** of Ole Waever (1995)
- **Widening**: five dimensions or sectors: military, political, economic, societal and environmental (Krell 1979, Buzan 1983)
- **Deepening**: from state- to people-centred perspectives

Hexagon Book Series: *Security Handbook for the Anthropocene*: ca. 270 chapters by ca. 250 authors, 80+countries (III, IV, V)
- Global review of scientific and political reconceptualization debate
- Sectorialization of soft security issues: water, food and health
- Environmental dimension of human security
- **Focus**: *Facing and coping* with security impacts of GEC issues

Soft security challenges: Environmental and health security (IV)
## 3.1. Widening, Deepening and Sectorialization of Security Concepts

<table>
<thead>
<tr>
<th>Security dimension</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>Food security</td>
<td>Cause &amp; Victim</td>
<td>Food &amp; Health security</td>
</tr>
<tr>
<td>Human security</td>
<td></td>
<td></td>
<td>Health security</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Societal, community security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National security</td>
<td>During Cold War Shrinking (in USA since 2001)</td>
<td>Energy security</td>
<td></td>
<td></td>
<td>Food &amp; health security</td>
</tr>
<tr>
<td>International and Regional security</td>
<td></td>
<td>Water security</td>
<td></td>
<td></td>
<td>Water security</td>
</tr>
<tr>
<td>Global and planetary security</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GEC</td>
</tr>
</tbody>
</table>
4. Environment: Object of Wars?

– Deliberate & Accidental Impacts of Wars on Environment

• 539 BC; Cyrus III (Persia): Diversion of Euphrates
• 431-404 BC. Destruction of Athenian crops by Sparta
• WWI: Devastation of agricultural and forest lands
• WWI: Firing of Romanian oil fields
• WWII: Scorched land tactics and salt-water inundation
• Korean War: bombing of dams in North Korea
• Vietnam: massive use of herbicides (Agent orange, white et al.)
• Gulf War: Burning of Kuwaiti oil fields by Iraq
• Balkans, Iraq (1991, 2003f.): Use of depleted uranium ammunitions

– Policy & Legal Efforts to Protect the Environment

• legal and moral condemnation: Hammurabi, Old Testament, Qur’an
• 4 legal pillars: arms control (ENMOD Convention, 1977), humanitarian law (Geneva Conv.), environmental law, human rights law
5. Environment: Cause of Conflict?


Old Focus of Policy Debate & Scientific Discourse:

- Environmental scarcity of water and food creates multiple socio-economic & political impacts that may lead to internal crises & even violent conflicts: malnutrition: health security challenges & risks

- Environmental degradation and pollution: of water and air: health security challenges & risks

New Focus: Global Environmental & Climate Change: new era of earth history (Anthropocene): since 2000

- PEISOR Model for the analysis: of environmental impacts on society and manifold security linkages
5.1. PEISOR Model: Global Change, Impacts and Policy Response

Other Models: Environment – Response
- UN-CSD (Committee for Sustainable Development)
- EEA (European Environment Agency)

PEISOR model distinguishes 5 stages:
- **P**: Pressure: Causes of GEC: Survival hexagon
- **E**: Effect: environmental scarcity, degradation & stress
- **I**: Impact: Extreme or fatal outcome: hazards
- **SO**: Societal Outcomes: disaster, migration, crisis, conflict
- **R**: Response by state, society, the economic sector and by using traditional and modern scientific knowledge to enhance coping capacity and resilience
5.2. PEISOR Model: Global Change, Environmental Stress, Impacts & Extreme Societal Outcomes

<table>
<thead>
<tr>
<th>Causes (Hexagon) Pressure</th>
<th>Effect of socio-economic interaction</th>
<th>Extreme and/or fatal Outcomes</th>
<th>National &amp; international Political Process Response</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Environmental scarcity &amp; degradation</td>
<td>Environmental &amp; political stress</td>
<td></td>
</tr>
</tbody>
</table>

- **direct link: climate change and extreme weather events**

- **Air**
- **Land**
- **Water**
- **Human population**
- **Rural system**
- **Urban system**

- **Global economic and political context/conditions**
  - (environmental) degradation
  - scarcity or abundance

- **National (socio-economic context and conditions, conflict structure, tradition)**

- **Hazard**: prevention avoidance
- **State decision**

- **Society**
- **Economy**
- **Transnational Governance**

- **Migration**: disaster conflict
- **Knowledge**: adaptation & mitigation decisions

---

feedback
6. Three Phases of Debate since 1989

  - Impacts of wars on environment (*Westing*), since 2001: UNEP-PCAUP (now:)
  - Debate on environmental security as a *national security issue* (Ullman, 1983; Mathews, 1989, N. Myers, 1989)

  - Canadian (*Homer-Dixon*) & Swiss (*ENCOP, Bächler*):
  - Case studies on env. scarcity, degradation as causes of environmental stress & conflicts and env. cooperation

- **Third Phase: Theoretical and empirical diversity without integration (2000-):**
  - Methodological diversity (e.g. GECHS, state failure project, Swiss NSCCR: mitigating syndroms of global change, PRIO: civil war research; World Bank: Collier: greed vs. scarcity
  - Many directions but hardly any synthesis of research.
6.1. Dalby/Brauch/Oswald Assessment: „Lessons Learned and Yet to Be Learned“

Result of second phase:
- Environmental change, resource scarcity and degradation was less likely to lead to international war.
- Threats of state collapse & internal conflict were partly caused, triggered or intensified by environmental factors, but focus is more on state capacity and policy dilemmas of social and environmental change.

Conclusions:
Both reactive & pro-active or anticipatory learning for adaptive & mitigating responses requires knowledge & understanding of interactions beyond the competence of any discipline and can only be achieved by multidisciplinary research teams.

During three phases:
- There is a lack of research on hazards and disasters, gender sensitivity, social vulnerability, bottom-up resilience as well as peace building.
- Overemphasis on research results by scientists in North America and Europe.
7. Emerging Debate since 2000: Securitization of Global Environmental Change and Climate Change

- Securitization of water

- Securitization of desertification

- Securitization of climate change: turning point (2007): Publication of the Fourth IPCC Assessment Report
  - a challenge for international security:
    - 17 April: UK put climate change on the agenda of the UNSC
    - June: WBGU Report: Climate Change as a Security Risk
    - March 2008: EU Report on Climate Change and Security
  - an issue of US national security: US Debate

- **Enemy is us:** our past, present, future burning of hydrocarbons since 1750, especially since 1950

- **Climate change causes & impacts:** shifts *focus to a pro-active security policy on long-term political impacts of:*:
  - temperature increase, sea-level rise and increase in number and intensity of hydro-meteorological hazards
  - forced migration and possible conflicts of migrants with resident population, humanitarian tragedies

- **Counter strategies require:**
  - No military (hard security) response to this challenge of survival!
  - Reducing GHG emissions by enhancing energy efficiency and shifting the sources of energy from hydrocarbon to renewables
  - Adaptation measures for affected regions, people, econ. sectors
  - Security policy for the Anthropocene must be based on a sustainable development strategy and aim at a sustainable peace
8. Towards a 4th Phase of Research: Scientific Proposal: Oswald Spring – Brauch - Dalby

– Three conceptual components for the fourth phase:
  • earth system research and the *Anthropocene* (Crutzen)
  • *Human, Gender and Environmental Security* (HUGE),
  • *Human and Environmental Security and Peace* (HESP).

– Study of substantive issues in 4th phase:
  • extreme weather events,
  • social systems and gender relations,
  • environmental, social and urban vulnerability,
  • migration, complex emergencies, crises and conflicts,
  • political coping strategies with human insecurities
9. Proposed MEHSEC Initiative: An ENVSEC Initiative for the Mediterranean

Since 2003: Policy Initiative: OSCE, UNEP, UNDP, UNECE, NATO, REC

Financed by: Austria, Belgium, Canada, Czech Republic, Finland, Italy, the Netherlands, Norway, Sweden, Switzerland & United States of America.

• ENVSEC: Environmental Security Initiative for Southeast Europe, Eastern Europe, Southern Caucasus & Central Asia

• Functional cooperation on environmental issues to prevent that they can become additional causes of conflict

• Regional effort to protect peace & environment:
  – Identify environment & conflict hotspots by carrying out desk & field assessments.
  – Present results of assessments in graphically rich maps, reports & website & draw attention of politicians & people to situations & hot spots with high risks
  – Help societies to deal with key issues by raising awareness, building capacities & strengthening institutions
  – Support concrete action & catalyse specific solutions for identified security-relevant environmental problems on the ground

• No spill-over to the solution of national conflicts e.g. in southern Caucasus.
9.1. An Environmental & Human Security Initiative for the Mediterranean (MEHSEC)

Mediterranean Environmental & Human Security:

- Address longer-term environmental dimension of human security posed by GEC: water, soil & climate change
- Address causes & regional impacts of GEC
- Framework of the Mediterranean Union
- Partners: MU (leader), EU, UN, UNEP, UNDP, OSCE, Arab League, WMO, IPCC et al.
9.2. Tasks of MEHSEC

- MEHSEC should address soft non-military, environmentally-induced security threats, challenges vulnerabilities and risks for the Mediterranean that are projected to evolve by 2025, 2050 and 2100 and that cannot be solved with military means or with a Hobbesian approach to security.

- They can only be overcome by Grotian forward-looking, proactive, functional cooperation that requires knowledge creation (e.g. regional climate change scenarios for the Mediterranean: Mediterranean climate impact assessment).

- **Initiative should coordinate global & regional organizations**
  - to analyse, assess available research and develop joint cooperative adaptation and mitigation measures
  - to develop cooperative measures dealing with societal consequences, including environmentally-induced forced migration that may lead to hunger & food riots, domestic conflicts & only in the worst case in violent conflicts.
  - Goal: preventive diplomacy and conflict avoidance by addressing root causes of conflicts:
    - Sustainability first Scenario of UNEP’s GEO-4 Report (2007)
10. Conclusions: Scientific Proposal & Policy Initiative

- Combination of Copenhagen & Paris Schools of Security Studies with HEXAGON analyses on EHS linkages:
  - Buzan, Waever, de Wilde: Securitization theory
  - Bigo’s link between international & internal security
  - HEXAGON: environmental dimension of human security

- Develop: environmental pillar of Med. Union
  - **Barcelona process**: became a bureaucratic process without a policy vision.
  - **Mediterranean Union**: a cooperative policy vision that needs forward looking content on policy areas where there are common risks to security & survival
  - Securitization of GEC and its regional impacts in the Mediterranean: huge area for functional cooperation
Thank you for your attention and for inviting me to share with you these ideas.

This text is for download at:

Send your comments to:
Brauch@onlinehome.de