

**United Nations University Office at the United Nations  
New York, 2 UN Plaza, DC2-2060, New York, New York 10017**

**Book Launch,  
Earth Day, 22 April 2008  
*Globalization and Environmental  
Challenges: Reconceptualizing  
Security in the 21st Century***

**3:00 – 6:00 pm, Conf. Room 5, UN Headquarters,**

**Hans Günter Brauch**

Free University of Berlin,

Institute on Environment and Human Security of the  
United Nations University (UNU-EHS) in Bonn;

Peace Research and European Security Studies (AFES-PRESS)

Editor, Hexagon Series on Human, Environmental Security and Peace



**UNITED NATIONS  
UNIVERSITY  
UNU-EHS**  
Institute for Environment  
and Human Security



Freie Universität



Berlin



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# **1. Introduction: Global Mapping of Security Concepts and Issues**

- **Three factors triggered this reconceptualization of security since 1990:**
  - **End of the Cold War (or 11 September 2001)**
  - **Process of Globalization (new dangers and actors)**
  - **Impact of Global Environmental Change**
- **Key thesis: Global contextual changes have triggered conceptual innovations since 1990**
- **Result: Global security reconceptualization: widening, deepening and sectorialization**
- **Goal: A global mapping of this reconceptualization**

## **2. Contextual Changes: Three Reasons for Reconceptualization of Security**

- **Four major global contextual changes: 1789-1989**
  - 1789: French revolution to 1815: Congress of Vienna
  - 1918: Revolutions, World War I, Versailles, League of Nations
  - 1945: World War II, Yalta and San Francisco (UN Charter adopted)
  - 1989-1990: Fall of the Berlin Wall, first peaceful global change
- **Globalization: New processes, actors and security dangers**
  - New processes: financial flows, trade, communication
  - New actors: non state actors: including organized crime and terrorists
  - New security dangers: 11 September, US banking, global financial crisis
- **Global Environmental Change**
  - New challenges: Climate change, water scarcity/degrad., desertification
  - New security actors: scientific epistemic communities: IPCC, GWP etc.
  - New policy fields: Sustainable development (env., developm. ministries)
  - New global environmental governance: UNFCCC, UNCCD, UNCBD

# 2.1. Global Environmental Change

- Since 1970s & 1980s: '*global environmental change*' (GEC) became a topic in the natural & social sciences
- Since the late 1980s and 1990s policy efforts on (politicization):
  - Climate Change: 1988: issue of G7; 1990: UN GA mandate; 1992: Rio summit: UNFCCC (1992) and Kyoto Protocol (1997)
  - Desertification: UNCCD (1994)
- Since 2000: GEC: considered as security issues (securitization)
  - The Hague: Minist. Declaration on water Security in 21st Century
  - Valencia: 2003: Desertification as a security issue in Mediterranean
  - Since 2002: climate change discussed as a security threat/risk
    - **2007: US debate on Climate Change: a National Security Threat**
    - **2007: Climate Change debated by UN Security Council**
    - **2007/2008: WBGU: Security Risk Climate Change**
- **2007: Turning Point for Securitization of Climate Change**

# 2.2. Global Environmental Change



**GEC poses threats, challenges, vulnerabilities and risks for global & human security and survival.**

# **3. Conceptual Innovations: From a Reconceptualization of Security to a Securitization Process**

## **■ Guiding Question, Key Thesis & Assumption**

- Did these global and regional political contextual changes trigger a re-conceptualizing of security in declarations of states, international organizations and can this reconceptualization of 'security' be mapped?
- **The global contextual changes have triggered conceptual innovations since 1990**
- **The goal of this book project is to map these global reconceptualization!**

## **■ Which were the conceptual innovations?**

- **Theoretical innovations unrelated to this global contextual change**
  - Social constructivism in the social sciences: social construction of realities
  - Ulrich Beck: Risk society (1986), World Risk Society (2007)
- **Copenhagen School: Buzan, Waever, de Wilde: On Security (1998)**
  - **Theory of Securitization (speech act)**
  - **Empirical observation: of widening and deepening of security agenda**

## **■ Innovation of this scientific dialogue project:**

- **Global Mapping of reconceptualization: in politics and scientific discourse**
- **This project: Sectorialization of security concepts and issues**
- **Securitization of Global Environmental Change focussing on:**
  - **Facing and Coping with Global Environmental Change**

# 3.1. Objective, Subjective and Intersubjective Security

- **Wolfers (1962)** pointed to two sides of the security concept: “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”.
- From a constructivist approach in international relations ‘security’ is the outcome of a process of social & political interaction where social values & norms, collective identities & cultural traditions are essential. Security: **intersubjective** or “what actors make of it”.
- **Copenhagen school** security as a “speech act”, “where a securitizing actor designates a threat to a specified reference object and declares an existential threat implying a right to use extraordinary means to fend it off”.
- Such a process of “securitization” is successful when the construction of an “existential threat” by a policy maker is socially accepted and where the “survival” against existential threats is crucial.



## 3.2. Copenhagen School: Wæver's Theory of Securitization

- **Securitization:** discursive & political process through which an inter-subjective understanding is constructed within a political community to treat something as an **existential threat** to a **valued referent object**, and to enable a **call for urgent and exceptional measures** to deal with the threat.
- **'Referent object'** (that is threatened and holds a general claim on 'having to survive', e.g. the **state, environment or liberal values**),
- **'Securitizing actor'** (who makes the claim – speech act – of pointing to an existential threat to referent object thereby legitimizing extraordinary measures, often but not necessarily to be carried out by the actor), and
- **Who manages to securitize what under what conditions & how?**
- **It is not up to analysts to settle the 'what is security?'** question – widening or narrowing – but more usefully one can study this as an open, empirical, political and historical question.
- **'Audience'** (have to be convinced in order for the speech act to be successful in the sense of opening the door to extraordinary measures).
- **What are the effects of this?** How does the politics of a given issue change when it shifts from being a normal political issue to becoming ascribed the urgency, priority and drama of 'a matter of security'.

### **3.3. Conceptual Linkages:**

**old: peace & security (UN Charter)**

**new: security & environment & development**

#### **Main goal of UN-Charter: Art. 1.1.**

- „to **maintain international peace and security**, and to that end: to take **effective collective measures for the prevention and removal of threats to the peace**, and for the suppression of acts of aggression or other breaches of the peace“.
- Development and environment concepts and policies developed later, as did linkage concepts of environment & security or environmental security have emerged since 1989.

# 3.4. Widening of Security Concepts: Towards Human & Environmental Security

4 trends in reconceptualisation of security since 1990:

- **Widening** (dimensions, sectors), **Deepening** (levels, actors)
- **Sectorialisation** (energy, food, health),
- **Shrinking** (in USA since 2001: WMD and terrorists)

## Dimensions & Levels of a Wide Security Concept

Security dimension ⇒ ↓ Level of interaction	Military	Political	Economic	Environmental ↓	Societal
Human individual ⇒			Food sec. Health sec.	Cause & Victim	Food & Health sec.
Societal/Community				↓↑	
<b>National</b>	Shrinking (in USA since 2001)		Energy se.	↓↑	Food & health security
International Regional			Water security	↓↑	Water security
Global/Planetary ⇒				<b>GEC</b>	

# 3.5. Environmental & Human Security

<b>Label</b>	<b>Reference object</b>	<b>Value at risk</b>	<b>Source(s) of threat</b>
<b>National security</b>	<b>The State</b>	<b>Territ. integrity</b>	<b>State, substate actors</b>
<b>Societal security</b>	<b>Societal groups</b>	<b>Nation. identity</b>	<b>Nations, migrants</b>
<b>Human security</b>	<b>Individual, humankind</b>	<b>Survival of humankind/people</b>	<b>Nature, state, globalization</b>
<b>Environmental sec.</b>	<b>Ecosystem</b>	<b>Sustainability</b>	<b>Humankind</b>
<b>Gender security (Oswald Spring)</b>	<b>Gender relations, indigenous people, minorities</b>	<b>Equality, identity, solidarity</b>	<b>Patriarchy, totalitarian institutions (governments, churches, elites) intoler.</b>

## 3.6. Four Phases of Research on Environment & Security Linkages

- *Phase I:* In 1970s & 1980s research focused on environmental impact of wars, with conceptual contributions & proposals by Ullman, Mathews, Myers.
- *Phase II:* During the 1990s, 2 empirical environmental research projects: by *Toronto Group* (Homer-Dixon) & *Swiss Group* (Bächler/Spillmann).
- *Phase III:* Since mid-990s a diversification by many research teams using many different methods occurred, hardly any integration of research results
- *Phase IV:* of environmental security research suggested by Dalby (2002) & Brauch (2003) that combines structural factors from natural & human dimensions based on expertise from both sciences with outcomes & conflicts.
- **During the first phase “there was a need to redefine security and to include a new range of threats” and “there was an acceptance that the object of security was no longer simply the state, but ranges to levels above and below the level of the state” (Lonergan, UNEP).**

## 3.7. Four Pillars of the Human Security Concept

- “Freedom from want” by reducing societal vulnerability through poverty eradication programs (UNDP ‘94; CHS 2003: Ogata/Sen: Human Security Now), **Japanese approach**;
- “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**;
- “Freedom to live in dignity” (**Kofi Annan: In larger Freedom, March 2005**), human rights agenda
- “Freedom from hazard impact” by reducing vulnerability and enhancing coping capabilities of societies confronted with natural & human-induced hazards (UNU-EHS 2004).

# 3.8. International Policy Activities Since 1990 in the UN System

- Brundtland (1987): **Sust. development & env. security**
- Gorbachev (1987) “**ecological security** as a top priority”.
- Since 1990s widening of security concept of
  - “**environmental security**” (UNEP, OSCE, OECD, UNU, EU),
  - “**human security**” (UNDP, UNESCO, UNU),
  - “**food security**” (FAO, UNDP, OECD et al.)
  - “**health security**” (WHO, World Bank),
  - “**energy security**” (World Bank, IEA),
  - “**livelihood security**” (OECD) have been used.
- **UNDP (1994): *Human Security Concept***
- **CHS (2003); Ogata/Sen: *Human Security Now.***
- **UN GA Outcome Document of Sep.2005: „human security“**
- **Secretary General’s High-level Panel on Threats, Challenges and Change (2004): *A more secure world: Our shared responsibility.***

## **3.9. SG's High-level Panel on Threats, Challenges and Change (2004): *A more secure world: Our shared responsibility***

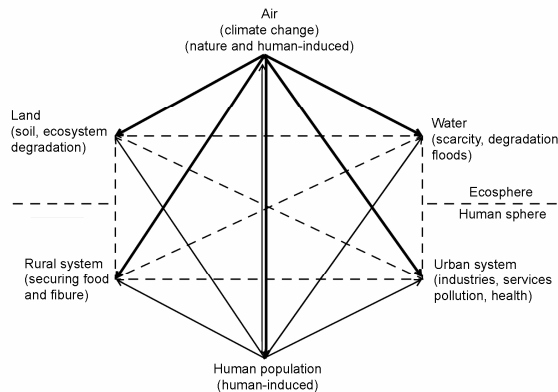
- Report of SG's High-level Panel reflects widening of "security" concept pointing to new tasks for the UN system in the 21<sup>st</sup> century.
  
- **Six clusters of threats:**
  1. **Economic & social threats:** poverty, infectious disease, env. Degradation
  2. **Inter-state;**
  3. **Internal conflict,**
  4. **Weapons of mass destruction:** nuclear, radiological, biological, chemical
  5. **Terrorism**
  6. **Transnational organized crime.**
  
- **"Environmental degradation" is among the threats confronting the UN that require preventive action "which addresses all these threats".**
  
- **Development "helps combat the poverty, infectious disease & environmental degradation that kill millions and threaten human security**



## **4. The Hexagon Book Series on Human and Environmental Security and Peace (HESP)**

- This book series includes monographs and edited volumes that cross scientific disciplines and develop common ground among scientists from the natural and social sciences, as well as from North and South, addressing common challenges and risks for humankind in the 21st century.
- From a human-centred perspective, this book series offers a platform for scientific communities dealing with global environmental and climate change, disaster reduction, human, environmental and gender security, peace and conflict research, as well as for the humanitarian aid and the policy community in national governments and international organizations.
- It wants to make a contribution to the fourth phase of debate on environmental security

# 4.1. Why Hexagon Book Series?



- direct impact of nature and human-induced "root cause": climate change on five factors
- direct impact of human-induced "root cause": population on five factors
- - - - -> complex interaction among four structural factors: land, water, urban and rural systems

- The 'hexagon' represents six key factors contributing to global environmental change – three *nature-induced* or supply factors: *soil*, *water* and *air* (atmosphere and climate), and three *human-induced* or demand factors: *population* (growth), *urban systems* (habitat, pollution) and *rural systems* (agriculture, food).
- Throughout the history of the earth and of *homo sapiens* these six factors have interacted. The supply factors have created the preconditions for life while human behaviour and economic consumption patterns have also contributed to its challenges (increase in extreme weather events) and fatal outcomes for human beings and society.
- The series covers the complex interactions among these 6 factors and their often extreme and in few cases fatal outcomes (hazards/ disasters, internal displacement, migrations, crises and conflicts), as well as crucial social science concepts relevant for their analysis.

## 6 causes of GEC or pressures

### human-induced supply side

- Air: Global climate change
- Soil degrad., desertification
- Water scarcity, hydrol. cycle

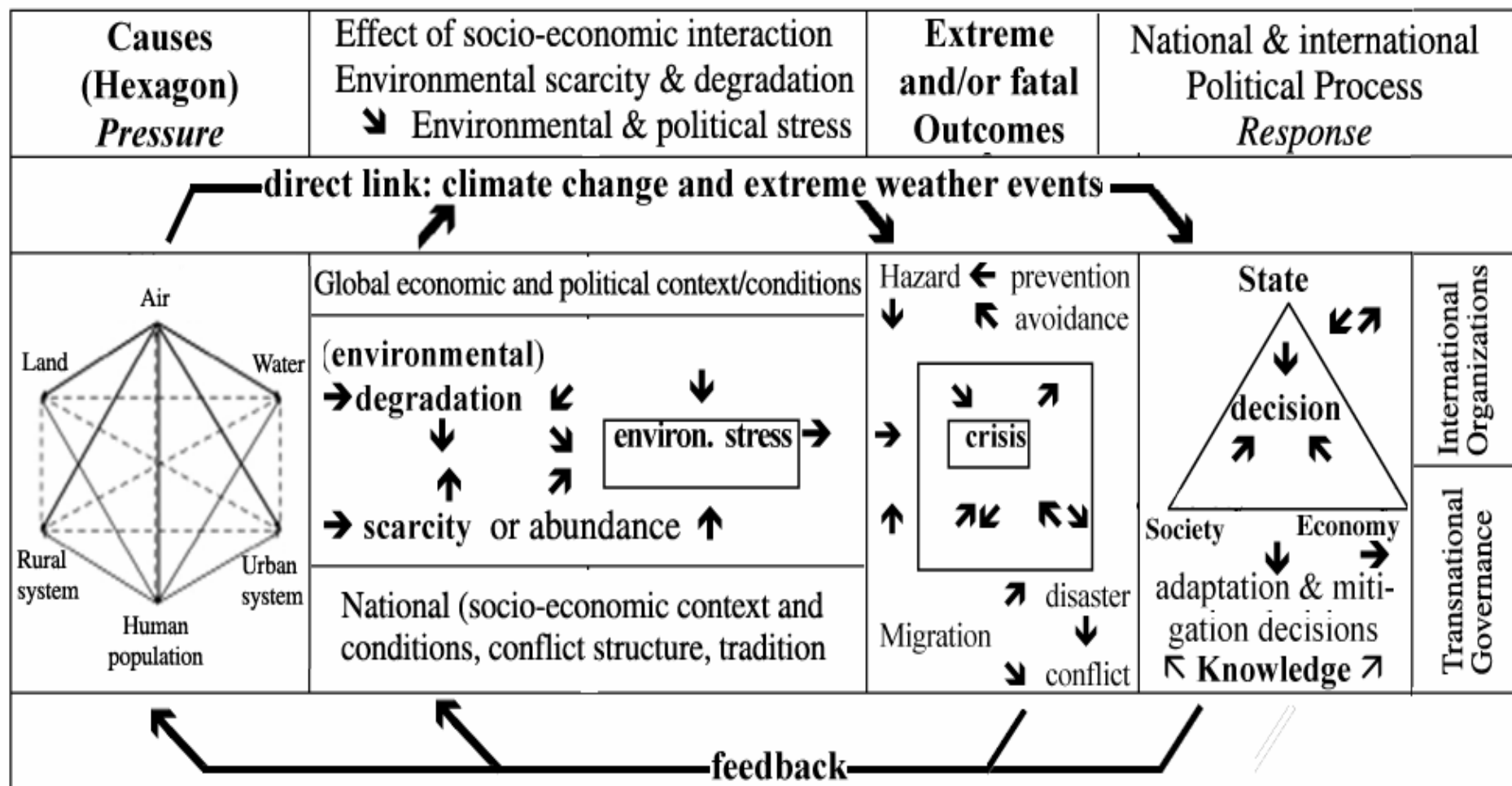
### Human-induced demand side

- Population growth
- Urbanization, Pollution, Health
- Rural systems: Agriculture & Food

## 4.2. Analyzing GEC: PEISOR Model Scenarios on Climate Change Impacts

- Focus: environment  $\leftrightarrow$  human interaction
- Other Models: Environment – Policy Response
  - OECD: PSR-Model (pressure, state of env., policy 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:** environm. scarcity, degradation & stress
  - **I: Impact:** Extreme or fatal outcome: hazards
  - **SO: Societal Outcomes:** disaster, migration, crisis, conflict etc.
  - **R: Response** by state, society, business and by using knowledge to enhance coping capacity and resilience

# 4.3. PEISOR Model: Global Change, Environmental Stress, Impacts & Extreme Societal Outcomes



# 4.4. Security and Environment in the Mediterranean – Conceptualising Security and Environmental Conflicts



Hans Günter Brauch, P. H. Liotta, Antonio Marquina, Paul Rogers, Mohammad El-Sayed Selim (Eds.): ***Security and Environment in the Mediterranean – Conceptualising Security and Environmental Conflicts***. (Berlin – Heidelberg – New York: Springer, 2003).

Security specialists, peace researchers, environmental scholars, demographers, climate, desertification, water, food and urbanisation specialists from the Middle East and North Africa, Europe and North America review security and conflict prevention in the Mediterranean, analyse NATO's Mediterranean security dialogue, offer conceptualisations of security and perceptions of security challenges as seen in North and South. The latter half analyses environmental security and conflicts in the Mediterranean and environmental consequences of World War II, the Gulf War, the Balkans wars and the Middle East conflict and examines factors of global environmental change: population growth, climate change, desertification, water scarcity, food and urbanisation issues as well as natural disasters. It draws conceptual conclusions for a fourth phase of research on human and environmental security and peace as well as policy conclusions for cooperation and partnership in the Mediterranean in the 21st century.

# 4.5. Water Resources in the Middle East:

## Israel-Palestinian Water Issues – from Conflict to Cooperation.

Hillel Shuval, Israel; Hassan Dweik, Palestine (Eds.):



Hillel Shuval · Hassan Dweik (Eds.)

## Water Resources in the Middle East

Israel-Palestinian Water Issues –  
From Conflict to Cooperation

 Springer

- Leading Palestinian, Israeli and international water experts document the importance of mutual understanding, respect and amity among peoples during a difficult period of stress.
- This book demonstrates hope, optimism and belief that people with good will can help contribute to peace and mutual cooperation in solving shared water problems essential for their mutual survival and welfare. The present water crisis facing the Middle East will become even more severe over the next twenty years, unless dealt with energetically and in good time.
- This situation requires urgent action by the countries of the region, the international community and civil society generally. It provides valuable source material for water scientists, engineers, political scientists, specialists in conflict resolution, environmentalists, economists, lawyers, administrators, managers and policy makers interested in understanding, developing, managing and protecting the scarce shared water resources of the Middle East and for the promotion of “Water for Life” for the benefit of all nations of the region.

## 5. Global Security Handbook for the Anthropocene

- In March 2004 Peace Research and European Security Studies (AFES-PRESS) launched a global scientific project that has involved about 300 scholars from many disciplines in the social and natural sciences from all parts of the world.
- As a result of five workshops (Montreal 2004, Sopron 2004; The Hague 2004; Istanbul 2005, Bonn 2005)
- Three major reference books have emerged:
  - Published in 2008 (vol. III, IV) and in 2009 (vol. V)
- A total of about 275 book chapters



# 5.1. Third AFES-PRESS Workshop in The Hague, Peace Palace: International Court of Justice





## 5.2. The Hexagon Book Series & the Security Handbook

- Editorial team of volumes III, IV and V: 11 colleagues from 10 countries, three are women from India, Kenya and Mexico and in volume IV half come from the South.
- Book series differs from traditional approaches in international relations of primarily authored by colleagues from OECD.
  - Vol. III: 92 authors from 36 countries
  - Vol. IV: 132 authors from 49 countries
- They address the key new objective security dangers and subjective security concerns primarily posed by the newly perceived security threats, challenges, vulnerabilities and risks that are developing from problems related to global environmental change in this new age of the 'Anthropocene'.

## 5.3. Team of 11 Co-editors from 10 countries

- **Hans Günter Brauch**, PD ( Adj. Prof. ) at the Free University of Berlin, chairman of AFES-PRESS, fellow at UNU-EHS in Bonn and editor of this series
- **Úrsula Oswald Spring**, Professor at National University, Mexi-co; UNU-EHS chair on social vulnerability; writes on sustainability, deveopment, gender, disaster, poverty.
- **Czeslaw Mesjasz**, Assoc. Professor, Vice Dean, Cracow University of Economics; publishes on systems, game theory, conflict resolution, negotiation, economics, security.
- **John Grin**, Professor, Director of Amsterdam School for Social science Research; publishes on societal transformations in water management, agriculture, health care.
- **Pál Dunay** is faculty member, Geneva Centre for Security Policy, was senior researcher at SIPRI (2004-2007),director of the Hunga-rian Institute of International Affairs in 2007.
- **Navnita Chadha Behera** (New Delhi), Professor at the Nelson Mandela Centre for Peace & Conflict Resolution, Jamia Millia Islamia; publishes: Kashmir, South Asian security
- **Béchir Chourou** teaches International Relations at the University of Tunis-Carthage in Tunisia,publishes on Euro-Mediterranean relations, food policy, human security.
- **Patricia Kameri-Mbote**, Associate Professor, School of Law, University of Nairobi, Chair, Dep. of Private Law, Programme Director, Intern.Environmental Law Research Centre,
- **P. H. Liotta** is Professor of Humanities and Executive Director of the Pell Center for International Relations and Public Policy, Salve Regina University, Newport, Rhode Island
- **Heinz Krummenacher** is managing Director of Swisspeace, heads its early warning program and is member of the UN staff college's Early Warning Preventive Measures training unit.
- **Joern Birkmann**, Academic officer of UNU-EHS, heads the section on vulnerability assessment, coordinates Working Group on “Measuring Vulnerability”.

## 5.4. Editors of first two volumes at work in Scheweningen, 11 September 2004



# 5.5. Hexagon Series, Vol. III & First volume of Security Handbook

Hans Günter Brauch  
Ursula Oswald Spring  
Czeslaw Mesjasz  
John Grin  
Pál Dunay

Navnita Chadha Behera  
Béchr Chourou  
Patricia Kameri-Mbote  
P. H. Liotta  
(Eds.)

VOL 3 / HEXAGON SERIES ON HUMAN  
AND ENVIRONMENTAL SECURITY AND PEACE

## Globalization and Environmental Challenges

Reconceptualizing Security  
in the 21st Century

 Springer

H.G. Brauch, J. Grin, C. Mesjasz, P. Dunay, N. Chadha Behera, B. Chourou, U. Oswald Spring, P.H. Liotta, P. Kameri-Mbote (Eds.): *Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century* (Berlin–New York: Springer-Verl.,2008); see at: <[http://www.afes-press-books.de/html/hexagon\\_03.htm](http://www.afes-press-books.de/html/hexagon_03.htm)>.

*Globalization and Environmental Challenges* pose new security dangers and concerns. In this reference book on global security thinking, 92 authors from five continents and many disciplines, from science and practice, assess the global reconceptualization of security triggered by the end of the Cold War, globalization and manifold impacts of global environmental change in the early 21st century. In 10 parts, 75 chapters address the theoretical, philosophical, ethical and religious and spatial context of security; discuss the relationship between security, peace, development and environment; review the reconceptualization of security in philosophy, international law, economics and political science and for the political, military, economic, social and environmental security dimension and the adaptation of the institutional security concepts of the UN, EU and NATO; analyze the reconceptualization of regional security and alternative security futures and draw conclusions for future research and action.

# 5.6. Hexagon Series, Vol. IV & Second vol. of Security Handbook

Hans Günter Brauch  
Úrsula Oswald Spring  
John Grin  
Czesław Mesjasz  
(Eds.)

Patricia Kameri-Mbote  
Navmita Chadha Behera  
Béchéir Chourou  
Heinz Krummenacher

VOL 4 / HEXAGON SERIES ON HUMAN  
AND ENVIRONMENTAL SECURITY AND PEACE



## Facing Global Environmental Change

Environmental, Human, Energy, Food,  
Health and Water Security Concepts

 Springer

Hans Günter Brauch, Úrsula Oswald Spring, John Grin, Czesław Mesjasz, Patricia Kameri-Mbote, Navmita Chadha Behera, Béchéir Chourou, Heinz Krummenacher (Eds.): *Facing Global Environmental Change: Environ-men-tal, Human, Energy, Food, Health and Water Security Concepts*. Hexagon Series on Human and Environmental Security and Peace, vol. 4 ( Berlin – Heidelberg – New York: Springer-Verlag, 2008), i.p .

In the second volume of this policy-focused, global and multidisciplinary security handbook on *Facing Global Environmental Change* addresses new security threats of the 21st century posed by climate change, desertification, water stress, population growth and urbanization. These security dangers and concerns lead to migration, crises and conflicts. They are on the agenda of the UN, OECD, OSCE, NATO and EU. In 100 chapters, 132 authors from 49 countries analyze the global debate on environmental, human and gender, energy, food, livelihood, health and water security concepts and policy problems. In 10 parts they discuss the context and the securitization of global environmental change and of extreme natural and societal outcomes. They suggest a new research programme to move from knowledge to action, from reactive to proactive policies and to explore the opportunities of environmental cooperation for a new peace policy.

# 5.7. Istanbul & Bonn, 2005: Security Threats, Challenges, Vulnerabilities & Risks

Fourth AFES-PRESS Workshop

Fifth AFES-PRESS  
Workshop

WISC, 24.-27.8.2005

IHDP, 9. - 13.10.2005

- **Planned next book:**
- Hans Günter Brauch, Úrsula Oswald Spring, Czeslaw Mesjasz, John Grin, Patricia Kameri-Mbote, Béchir Chourou, Pal Dunay, Jörn Birkmann, (Eds.):
- *Coping with Global Environmental Change, Disasters and Security – Threats, Challenges, Vulnerabilities and Risks*
- (Berlin – Heidelberg – New York: Springer-Verlag, 2009).

## **5.8. Hexagon Series, Vol. V & Third vol. of Security Handbook**

**The third volume approximately 100 chapters will address in**

**part I:** Introduction: Concepts of Security Threats, Challenges, Vulnerabilities, Risks;

**part II:** Military and Political Security Threats, Challenges, Vulnerabilities and Risks;

**part III:** Economic, Social, Environmental Security and Human Threats, Challenges, Vulnerabilities and Risks in the Near East, North & Sub-Sahara Africa and in Asia;

**part IV:** Threats, Challenges, Vulnerabilities and Risks for Urban Centres in Hazards and Disasters;

**part V:** Coping with Global Environmental Change: Climate Change, Soil and Desertification, Water Management, Food and Health;

**part VI:** Coping with Hazards and Strategies for Coping with Social Vulnerability and Resilience Building;

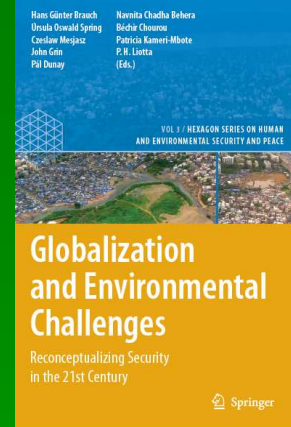
**part VII:** Coping with Global Environmental Change: Scientific. International and Regional Political Strategies, Policies and Measures;

**part VIII:** A Technical Tool: Remote Sensing, Vulnerability Mapping and Indicators of Environmental Security Challenges and Risks;

**part IX:** Towards an Improved Early Warning of Conflicts and Hazards and

**part X:** Summary and Policy Conclusions.

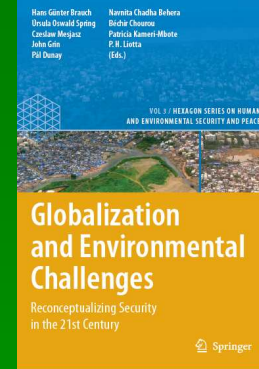
# 6. Globalization and Environmental Challenges



- **Methods of conceptual mapping**
  - **Etymology:** origins of the term & concept in different languages and cultures: western, eastern, African & indigenous traditions
  - **Conceptual History:** (Reinhard Koselleck)
  - **Conceptual Mapping:** of the changes in the use of the concept in different dimensions and disciplines, e.g. in international law, political science, IR, security studies, Peace Research
- **Methods of Empirical Analysis: Empirical Mapping**
  - **Use of the security concepts** in international organizations, in policy debate and in International relations and other disciplines
  - **Analysis of security issues** to which a “security concept” applies



# 6.1. Excerpts from the Forewords



## Stavros Dimas

Commissioner for the Environment of the European Union since 2004

## Prof. Dr. Hans van Ginkel

Former Rector, UNU  
United Nations University  
Former UN Under-Secretary-General (1997-2007)



*Globalisation and Environmental Challenges: Reconceptualising Security in the 21st Century*

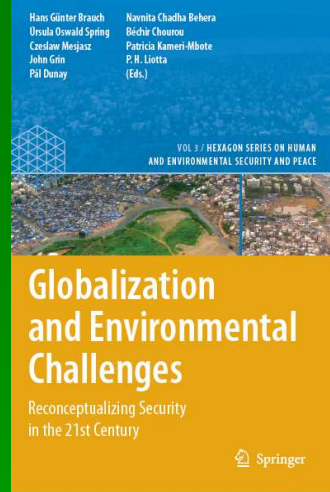
– sums up many of the dilemmas and challenges facing policy-makers today.”

“Since the end of the Cold War, the security debate has changed fundamentally.

A study which addresses the new challenges and suggests responses will therefore be a welcome addition to the policy-maker’s toolkit. For this reason, I warmly welcome this volume.”

- “The ‘hexagon’ is also the logo of the UNU system that combines under the goal of human security five research areas on peace, governance, development, science, techno-logy and society as well as the environment.
- This unique compilation of global scholarship deserves many readers and should be available in all major university and research libraries in all parts of the world and for all scholars also on the Internet.

# 6.2. Structure of the Book



Hans Günter Brauch  
Ulrich Oswald Spring  
Czesław Mięsiński  
John Grin  
Pál Dunay

Namita Chadia Behera  
Bichu Chomwe  
Patricia Kamuti-Mbote  
P. H. Liotta  
(Eds.)

VOL. 3 / HEXAGON SERIES ON HUMAN  
AND ENVIRONMENTAL SECURITY AND PEACE

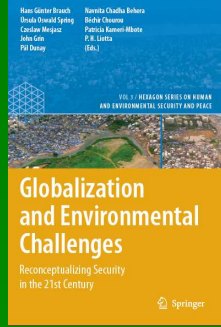
**Globalization  
and Environmental  
Challenges**

Reconceptualizing Security  
in the 21st Century



1. Introduction
2. Conceptual quartet
3. Philosophical, ethical and religious contexts for conceptualization of security
4. Spatial context: actors and referent objects
5. Reconceptualization of security disciplines
6. Reconceptualization of security dimensions
7. Reconceptualization of security in institutions
8. Reconceptualization of regional security
9. Reconceptualization Security and Alternative Security Futures
10. Summary and Conclusions

# 6.3. Preface Essays & Introduction

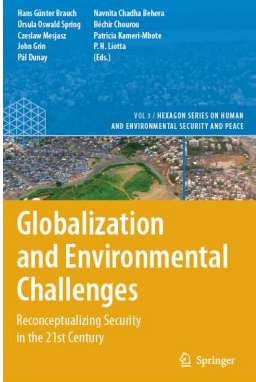


## Prefaces Essays:

- *Jonathan Dean* (USA): Rethinking Security in the New Century –Return to the Grotean Pattern
- *Úrsula Oswald Spring* (Mexico): Peace, Development, Ecology and Security IPRA 40 Years after Groningen
- *Vandana Shiva* (India) Globalization from Below: Ecofeminist Alternatives to Corporate Globalization
- *Narcís Serra* (Spain): Towards a Human Security Perspective for the Mediterranean

## Part I Introduction: Theoretical Contexts for Security Reconceptualization since 1990

- 1 *Hans Günter Brauch* (Germany): Introduction: Globalization and Environmental Challenges: Reconceptualizing Security in the 21st Century
- 2 *Czesław Mesjasz* (Poland): Security as Attributes of Social Systems

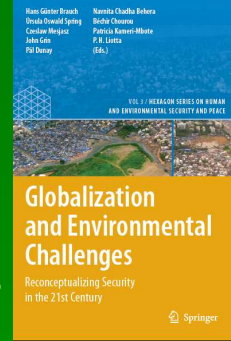


# 6.4. Chap. 3: Conceptual Quartet: Security and its Linkages with Peace, Environment & Development

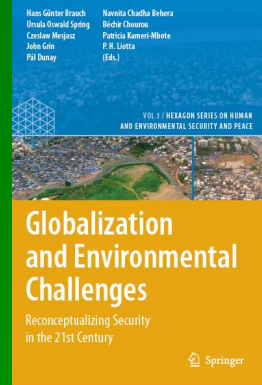
## Programmes, pillars & linkage concepts within the quartet

IR research programmes	Conceptual Quartet	Conceptual Linkages
<ul style="list-style-type: none"> <li>▪ <b>Peace Research</b></li> <li>▪ <b>Security Studies</b></li> <li>▪ <b>Development Stud.</b></li> <li>▪ <b>Environment Studies</b></li> </ul> <p>4 conceptual pillars</p> <ul style="list-style-type: none"> <li>▪ <b>I: Security dilemma</b></li> <li>▪ <b>II: Survival dilemma</b></li> <li>▪ <b>III: Sustainable development</b></li> <li>▪ <b>IV: Sustainable peace</b></li> </ul>	<p>Peace <span style="float: right;">Security</span></p> <p style="text-align: center;">▪ I: <i>Security dilemma</i></p> <p>Development <span style="float: right;">Environment</span></p> <p style="text-align: center;">III: <i>Sustainable development</i></p>	<p>Political use of concepts &amp; theoretical debates on 6 linkages</p> <ul style="list-style-type: none"> <li>▪ Peace &amp; security</li> <li>▪ Peace &amp; development</li> <li>▪ <b>Peace &amp; environment</b></li> <li>▪ Development &amp; security</li> <li>▪ <b>Devel. &amp; environment</b></li> </ul> <p>Of interest here:</p> <ul style="list-style-type: none"> <li>▪ <b>Security &amp; environment</b></li> </ul>

# 6.5. Conceptual Quartet: Security, Peace, Development and Environment & its Dyadic Linkages



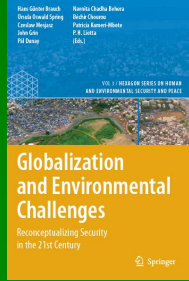
- **UN Charter: only international peace & security: Revisited in 2007**
  - **Ole Wæver (Denmark, Copenhagen School, political Science):** Peace & Security: Two Evolving Concepts & Their Changing Relationship
- **Peace & environment: ecofeminist perspective from the South**
  - **Úrsula Oswald Spring (Mexico, UNAM, social anthropology, peace research):** Peace and Environment: Towards a Sustainable Peace as Seen From the South
- **Underdevelopment and human insecurity**
  - **Indra de Soysa (Sri Lanka, Norway, TU Trondheim):** Underdevelopment and Human Insecurity: Overcoming Systemic, Natural, and Policy Risk
- **Development & environment**
  - **Casey Brown: (USA, Columbia University):** Emergent Sustainability: The Concept of Sustainable Development in a Complex World
- **Development & security**
  - **Peter Uvin: (USA, Tufts University):** Development and Security: Genealogy and Typology of an Evolving International Policy Area
- **Security & environment**
  - **Simon Dalby: (Canada, Carleton University, Ottawa, Geography):** Security and Environment Linkages Revisited



# 6.6. Philosophical, Ethical and Religious Contexts for Conceptualizations of Security

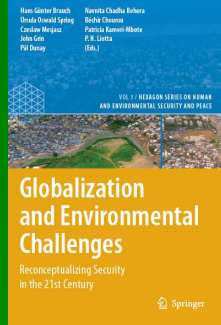
10. **Ursula Oswald Spring (Mexico):** Oriental, European, and Indigenous Thinking on Peace in Latin America
11. **Michael von Brück (Germany):** Security in Hinduism and Buddhism
12. **Kurt W. Radtke (Netherlands):** Security in Chinese, Korean, and Japanese Philosophy and Ethics
13. **Eun-Jeung Lee (South Korea):** Security in Confucian Thought: Case of Korea
14. **Mitsuo & Tamayo Okamoto (Japan):** Security in Japanese History, Philosophy and Ethics: Impact on Contemporary Security Policy
15. **Naresh Dadhich (India):** Thinking on Security in Hinduism: Contemporary Political Philosophy and Ethics in India
16. **Robert Eisen (USA):** Human Security in Jewish Philosophy and Ethics
17. **J. Frederik Arends (Netherlands):** From Homer to Hobbes and Beyond – Aspects of ‘Security’ in the European Tradition
18. **Hassan Hanafi (Egypt, philosophy):** Security Conceptualization in Arab Philosophy and Ethics and Muslim Perspectives
19. **Jacob Emmanuel Mabe (Cameroon/Germany, philosophy, political science):** Security in African Philosophy and Historical Ideas
20. **Georgina Sanchez (Mexico):** Security in Latin American Philosophy, Ethics, and History of Ideas
21. **Domicia Proenca, Eugenio Diniz (Brazil):** The Brazilian View on the Conceptualization of Security: Philosophical, Ethical and Cultural Contexts and Issues

# 6.7. Spatial Context: Actors and Referent Objects



22. **Hans Günter Brauch (Germany):** Securitization of Space and Referent Objects
23. **Vilho Harle, Sami Moisi (Finland):** Structural Setting for Global Environmental Politics in a Hierarchic International System: A Geopolitical View
24. **J. Barnett (Australia), R.A. Matthews, K. O'Brien (USA):** Global Environmental Change and Human Security (GECHS)
25. **J. Saxe-Fernandez (Mexico):** Globalization and Security: The US 'Imperial Presidency': Global Impacts in Iraq and Mexico
26. **U. Oswald Spring (Mexico):** Globalization from Below: Social Movements and Altermundism –Reconceptualizing Security from a Latin American Perspective
27. **B. Hettne (Sweden):** Security Regionalism in Theory and Practice
28. **M. Aydin, S. Acikmese (Turkey):** Identity-based Security Threats in a Globalized World: Focus on Islam
29. **B. Karnad (India):** Security and Sovereignty
30. **V. Sahni (India):** Subordinate, Subsumed and Subversive: Sub-national Actors as Referents of Security
31. **G. Hoogensen (Norway):** Non-state Based Terrorism and Security
32. **A. Tickner, A.C. Mason (USA, Columbia):** Agents of Insecurity in the Andes: Transregional Crime and Strategic Relations
33. **J. Kugler (USA):** Re-conceptualizing Security Research with Individual Level Data

# 6.8. Reconceptualization of Security in Scientific Disciplines



34 **Jean-Marc Coicaud (France, UNU-ONY, law, philosophy):** Quest for International Security: Benefits of Justice versus the Trappings of Paranoia

35 **Michael Bothe (Germany): Security in International Law Since 1990**

- Peace and security concept in the UN Charter
- Changes in the definition of both concepts in the resolutions of the UN Security Council since 1990 (present state practice)
  - Iraq/Kuwait case of 1991
  - Internal situation of states as a threat to international peace and security
  - New Threats by non-state actors
  - Impact of a broader concept of human and environmental security
  - Extended security concept: permissibility of unilateral use of force
  - Impact of debate on peace and security for reality

36 **S. Mansoob Murshed (Bangladesh):** Human Security from the Standpoint of an Economist: freedom from fear vs. freedom from want

37 **John Baylis (UK):** The Concept of Security in International Relations 495

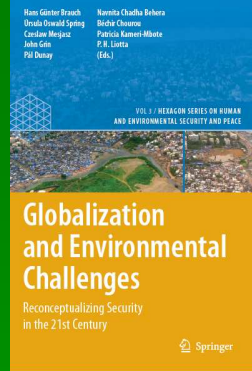
- Debate of realists, neo-realists and alternative approaches

38 **Ulrich Albrecht - Hans Günter Brauch (Germany):** Security in Peace Research and Security Studies

- Conceptual mapping of the thinking on security in two competing schools in the USA, Europe, and the rest of the world



# 6.9. Reconceptualization of Security Dimensions



39 **Laura Shepherd - Jutta Weldes (UK):** Security: The State (of) Being Free From Danger?

40 **H.G. Brauch:** From a Security towards a Survival Dilemma  
Shift from the state centred security dilemma that explains why nations arm to a human-centred survival dilemma: that confronts human beings

Review of the conceptual debate on the five dimensions of a widened security concept by three authors of the Copenhagen School

41 **Barry Buzan (UK, LSE):** The Changing Agenda of Military Security

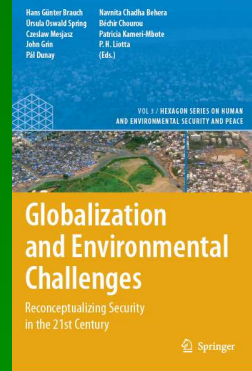
42 **Thomaz Guedes da Costa (Brazil):** Political Security, an Uncertain Concept with Expanding Concerns

43 **Czeslaw Mesjasz (Poland):** Economic Security

44 **Ole Wæver (Denmark):** The Changing Agenda of Societal Security

45 **Jaap H. de Wilde (Netherlands):** Environmental Security Deconstructed

# 6.10. From a Security Dilemma towards a Survival Dilemma

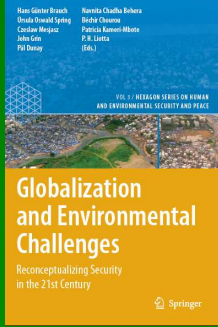


## Security Dilemma

- State-centred & explains behaviour of states, especially the relationship between perception of the other country (fear) and its
- Response: national security strategies
- Military means (armament)
- Results: often regional arms races between neighbouring states
- Concept: national, regional and international state security
- Well-established concept by Herz (1950) and Ken Booth (2008)

## Survival Dilemma

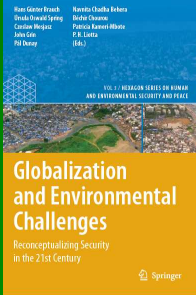
- Human-centred concept
- Dilemma faced by poor & vulnerable human beings, e.g. in hazards:
  - to stay at home & die of thirst and hunger
  - to move to refugee camps & wait for assistance
  - to move with herds and fight for access to water
  - to migrate to city slums
- Policy Responses:
  - Reactive: humanitarian assistance
  - Proactive: Sustainable Development as a Human Security policy
- My own proposed concept



# 6.11. Reconceptualization of Security in Institutions: UN, EU etc.

- 46 **Jürgen Dedring (Germany)**: Human Security and the UN Security Council 605
- 47 **Sebastian von Einsiedel, Heiko Nitzschke and Tarun Chhabra**: Evolution of the United Nations Security Concept: Role of the High-Level Panel on Threats, Challenges, and Change
- 48 **Ole Jacob Sending (Norway)**: Security, Development and UN Coordination
- 49 **Monika Wohlfeld (Germany)**: Reconceptualization of Security in the CSCE and OSCE
- 50 **Rolando Mosca Moschini (Italy)**: The Comprehensive Security Concept of the European Union
- 51 **Stefan Hintermeier (Germany)**: Reconceptualization of External Security in the European Union since 1990
- 52 **Andreas Maurer (Germany) - Roderick Parkes (UK)**: Democracy and European Justice and Home Affairs Policies from the Cold War to September 11
- 53 **Magnus Ekengren (Sweden)**: From a European Security Community to a Secure European Community Tracing the New Security Identity of the EU
- 54 **Louka T. Katseli (Greece)**: EU Policy Coherence on Security and Development A New Agenda for Research and Policy-making 705
- 55 **Pál Dunay (Hungary)**: From Obsession to Oblivion: Reconceptualization of Security in NATO since 1990
- 56 **Alberto Bin (Italy)**: NATO's Role in the Mediterranean and Broader Middle East Region 725
- 57 **Ortwin Hennig - Reinhold Elges (Germany)**: German Action Plan: Civilian Crisis Prevention, Conflict Resolution and Peace Consolidation – A Reconceptualization of Security
- 58 **Stephan Klingebiel - Katja Roehder (Germany)**: Interfaces between Development and Security: Converging the Role of Development Policy and Security Policy?

# 6.12. Reconceptualization of Regional Security



- 59 **Sven Biscop (Belgium)**: European Security in the 21st Century: An Institutional Perspective
- 60 **Mustafa Aydın - Neslihan Kaptanoğlu (Turkey)**: Regionalization of Great Power Security – Near Abroad, Broader Middle East, and European Neighbourhood
- 61 **Béchir Chourou (Tunisia)**: A Regional Security Perspective from & for Arab World
- 62 **U. Joy Ogwu (Nigeria)**: ECOWAS and Regional Security Challenges
- 63 **Martin R. Rupiya - Alfred G. Nhema (Zimbabwe)**: A Regional Security Perspective from and for the Horn of Africa
- 64 **Naison Ngoma (Zambia) - Len Le Roux (South Africa)**: Regional Security in Southern Africa Development Community: Perspectives on Security Challenges
- 65 **Navnita Behera (India)**: The Security Problematique in South Asia: Alternative Conceptualizations
- 66 **Eun-Jeung Lee (South Korea)**: Security Debates in East Asia since the End of the Cold War
- 67 **Alan Hunter (UK) Liu Cheng (China)**: China & New International Security Agenda
- 68 **Kevin P. Clements (NZ)- Wendy Foley (A)**: Security in the New Millennium: Debate in South Pacific on Peace & Security: Alternative Formulations in Post Cold War Era
- 69 **Francisco Rojas Aravena (Chile)**: Security on the American Continent: Challenges, Perceptions, and Concepts
- 70 **P. H. Liotta and James F. Miskel (USA)**: Towards an Ethical Framework for Security

# 6.13. Reconceptualization Security and Alternative Security Futures



**71 Czesław Mesjasz (Poland):** Prediction in Security Theory and Policy

**72 Heinz-Dieter Jopp - Roland Kaestner (Germany):** Climate Change and Security in the 21st Century

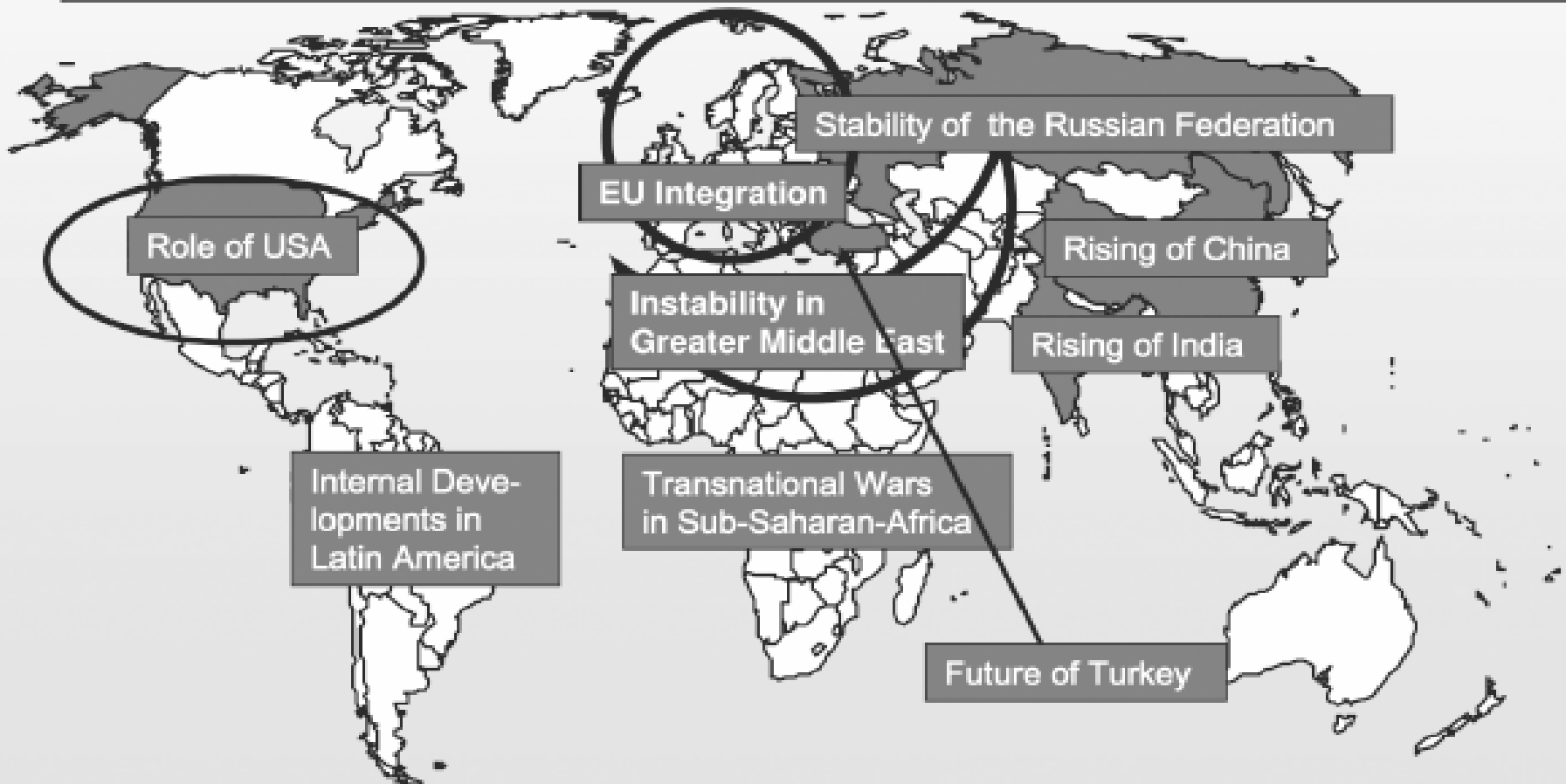
**73 Heikki Patomäki (Finland):** Global Security: Learning from Possible Futures

**74 G.A. McBean (Canada):** Role of Prediction in Sustainable Development and Disaster Management

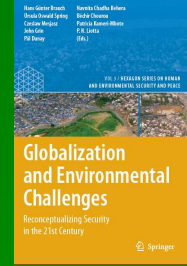
# 6.14. Climate Change and Security in the 21st Century

Figure 72.10: Political Developments in Geographic Regions. Source: the authors.

## Global Challenges for World Order in the 21st Century



# 6.15. Summary and Conclusions



## 75 *Ú. Oswald Spring – H.G. Brauch: Reconceptualizing Security in the 21st Century: Conclusions for Research & Policy-making*

Summarises global reconceptualization of security in North and South.

- **First Change: Towards a Post Cold War International Order**
- **Second Change: Widening of Globalization since 1990**
- **Third Change: Task is real: Coping with Global Environmental Change**

### Reconceptualization Matters

- **Unpredictable nonlinear policy changes**
- **New equity issues: contribution to climate change and victims of climate related natural hazards (North – South gap): eg US-Bangladesh**
- **Hobesian, power-based military mind-set offers no solution**
- **Grotian, multilateral cooperative approach and both top-down and bottom-up approaches are needed: resilience & survival strategies.**

### Need for Scientific Research on Security

- **Increase multi- & transdisciplinary research on global env. Challenges**
- **Shift from a Security to a Survival Dilemma**

# 7. Relevance of Reconceptualizing Security for the United Nations

**Securitization:** global environmental change and climate change have become issues of utmost importance that require extraordinary means

**From state to human security:** UNDP: Southern initiative,

- Canada has tabled it on the agenda of the UNSC
- Human Security Network and Friends of Human Security
- Persued by UNU and promoted by UNESCO since 1997

**Environmental Security:** adressed by UNEP and UNU

**Climate Change and International Security:**

- Has been put on the agenda of the UNSC on 17 April 2007 by the UK
- Has been taken up by the European Council in March 2008.

**Four chapters in the book reviewed mapped the changes in the thinking on and the use of the security concept in the UN**

- Dedring
- Einsiedel, Nitzschke, Chhabra
- Sending
- Bothe: Security and International Law



# 8. Politicization & Securitization of Global Environmental Change: Security Responses to the Anthropocene

## Politicization of GEC: since Earth Summit of Rio de Janeiro:

- Adoption of UN Framework Convention of Climate Change (1992)
  - Kyoto Protocol (1997)
- UN Convention on Biodiversity (1992)
- UN Convention to combat Desertification (1994)
- **Assessment Reports of IPCC 1990, 1995, 2001, 2007**

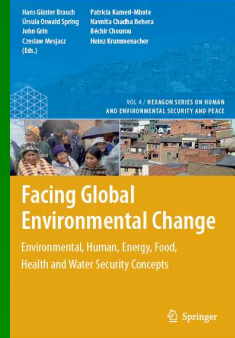
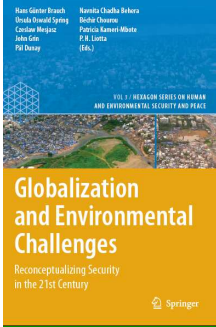
## Securitization of GEC: since 2000

- Securitization of Water: Since 2000: the Hague Declaration
- **Securitization of Climate Change: since 2000, turning point 2007**
- Securitization of Soil: Valencia in 2003

## Securitization of Climate Change in the UN during 2007

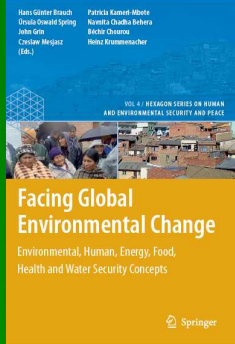
- **April 2007: UN Security Council**
- July 2007: UN General Assembly
- September 2007: High Level Meeting by the Secretary-General

# 8.1. Climate Change as a Security Danger & Concern



- Since early 21st century climate change has increasingly been perceived as a threat to ‘national’, ‘international’, and ‘human security’.
- Climate change is being securitized in government reports and in statements of government officials in the UK & Germany
- Since 2007 several policy-oriented studies have securitized climate change from different vantage points and concepts of security by analyzing climate change as:
  - an *international security* threat, challenge, vulnerability, risk;
  - a *national security* threat for the United States and as
  - a *human security* challenge that will affect the highly socially vulnerable poor population in the North (Hurricane Katrina) and South

# 8.2. Climate Change as an International Security Issue



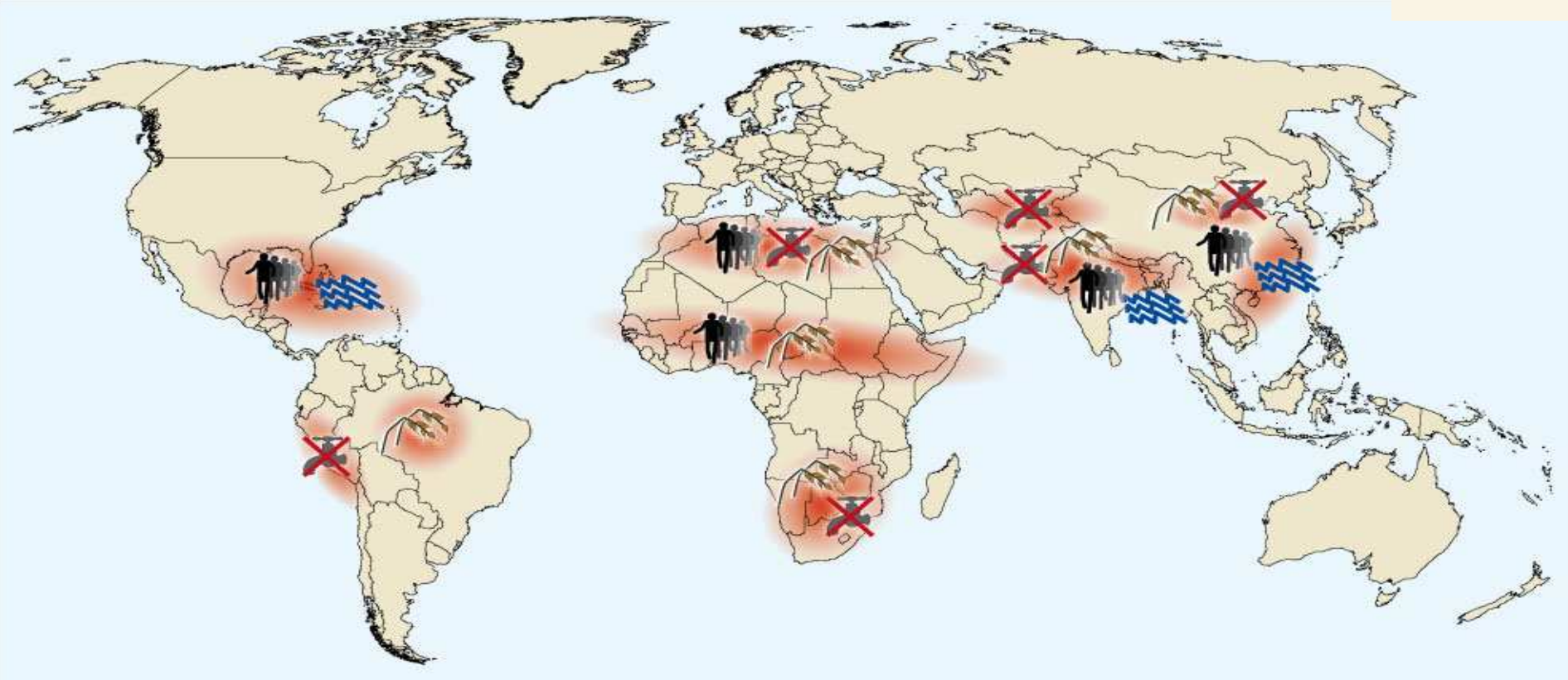
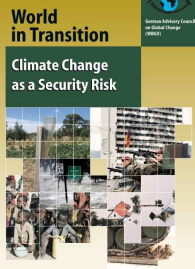
- **Peter Gleick** addressed links between climate & international security since late 1980's;
- **Brauch (2002)** study for German Environment Ministry on Climate Change and Conflicts focused on:
  - causes of climate change and complex interactions with other GEC drivers that contribute to environmental stress that may trigger conflict; outcomes of environmental stress;
  - cases studies on small island states, **Mexico, Bangladesh, Egypt and Mediterranean**, conceptual conclusions for scientific considerations & strategies aiming at conflict prevention.
- **WBGU (2007/2008)**. *German Advisory Council on Global Change* reviewed the scientific research on 'Climate Change as a Security Risk'.
- **UK Foreign Sec. Margaret Beckett (17.4.2007) UNSC debated Climate Change**
  - Climate change is a security issue but it is **not a matter of narrow national security** - it has a new dimension... This is about our **collective security** in a fragile & increasingly interdependent world."
- **On 31 July to 2 August 2007**, UN General Assembly held an "informal thematic debate" on "climate change as a global challenge".
- **UN SG Ban Ki-Moon** a high-level event on climate change (24.9.2007)

## 8.3. Climate change as a threat to internat. security



- WBGU: climate change could exacerbate environmental crises: drought, water scarcity & soil degradation, intensify land-use conflicts & trigger further environmentally-induced migration.
- New conflict constellations are likely to occur. Sea-level rise; storm & floods could threaten cities & industrial regions in China, India & USA.
- WBGU identified 4 conflict constellations in different world regions:
  1. **“Climate-induced degradation of freshwater resources”**: 1.1 billion people are currently without access to safe drinking water. The situation could worsen for hundreds of millions of people as climate change alters the variability of precipitation & quantity of available water.
  2. **“Climate-induced decline in food production”**: More than 850 million people worldwide are undernourished. This situation is likely to worsen in future as a result of climate change.
  3. **“Climate-induced increase in storm and flood disasters”**.
  4. **“Environmentally-induced migration”**,

# 8.4. WBGU Regional Hotspots



## Conflict constellations in selected hotspots



Climate-induced degradation of freshwater resources



Climate-induced decline in food production



Hotspot

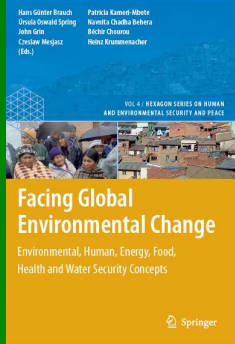
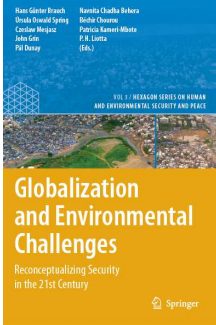


Climate-induced increase in storm and flood disasters

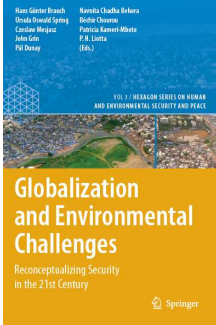


Environmentally-induced migration

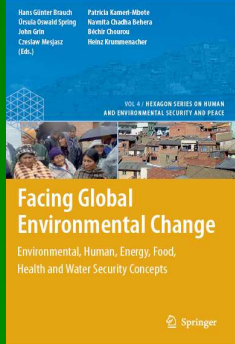
# 8.5. Climate Change and the Security Council, 17 April 2007



- UK Foreign Secretary **Margaret Beckett** stressed that “what makes wars start – fights over water, changing patterns of rainfall, fights over food production, land use. There are few greater potential threats.” She argued that “an unstable climate will exacerbate some of the core drivers of conflict, such as migratory pressures and competition for resources.”
- **Japan’s Ambassador Kenzo Oshima** said that “it is clear that climate change can pose threats to national security ... [and] in the foreseeable future climate change may well create conditions or induce circumstances that could precipitate or aggravate international conflicts.”
- However, the representatives of China, Russia, Qatar, Indonesia, and South Africa argued that “the Security Council was not the place to take concrete action.”
- While Pakistan opposed the debate, Peru, Panama, Papua New Guinea, and small island states agreed with the UK.
- **UN Secretary General, Ban Ki-moon** “projected changes in the earth’s climate are thus not only an environmental concern. ... Issues of energy and climate change can have implications for peace and security.”
- UN Security Council, SC/9000, 5663rd meeting, 17 April 2007: “Security Council holds first-ever debate on impact of Climate change on peace, security, hearing 50 speakers”; at: <http://un.org/news/press/docs/2007/sc9000.doc.htm>;



# 8.6. Climate Change: General Assembly & Secretary-General

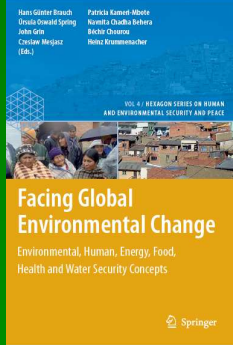


## UN General Assembly “informal thematic debate”

- On 31 July to 2 August 2007, the UN General Assembly held an “informal thematic debate” on “climate change as a global challenge”.
- On 31 July, two expert panel discussions were held that focused on “The science, the impact and the adaptation imperative,” and on mitigation strategies in the context of sustainable development.
- From 1-2 August, member states spoke on their national strategies and international commitments to address climate change.

## UN Secretary-General Ban Ki-moon high-level event

- On 24 September 2007, United Nations Secretary-General Ban Ki-moon convened a high-level event on climate change to “advance the global agenda on climate change when he me[t] with heads of state and other top officials from more than 150 countries at United Nations Headquarters.”
- This high-level event on the eve of the UN General Assembly’s annual General Debate was to secure political commitment and build momentum for the UN-FCCC COP13/MOP3 meeting in Bali on 3-14 December 2007.
- In his background note, the Secretary-General addressed the multiple links of climate change to food, water and health security.



# 8.7. European Council:

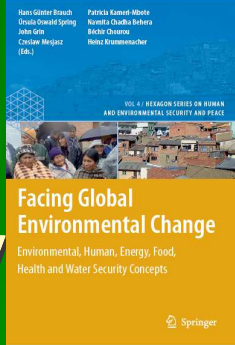
# Climate Change and International Security (March 2008)

## I Introduction

- The risks posed by climate change are real and its impacts are already taking place.
- The UN estimates that all but one of its emergency appeals for humanitarian aid in 2007 were climate related. In 2007 the UN Security Council held its first debate on climate change and its implications for international security.
- The European Council has drawn attention to the impact of climate change on international security and in June 2007 invited the High Representative and the European Commission to present a joint report to the European Council in Spring 2008.



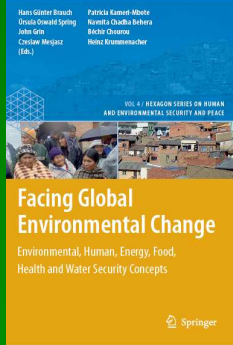
# 8.8. European Council: Climate Change and International Security



## II. THREATS

The effects of climate change are being felt now: temperatures are rising, icecaps and glaciers are melting and extreme weather events are becoming more frequent and more intense. The following section outline some of the forms of conflicts driven by climate change which may occur in different regions of the world.

- i) Conflict over resources
- ii) Economic damage and risk to coastal cities & critical infrastructure
- iii) Loss of territory and border disputes
- iv) Environmentally-induced migration
- v) Situations of fragility and radicalization
- vi) Tension over energy supply
- vii) Pressure on international governance



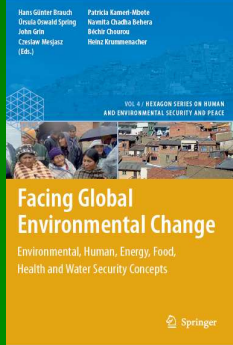
# 8.9. European Council: Climate Change and International Security

## III. GEOGRAPHICAL EXAMPLES

In many regions, climate change is fuelling one or more of the threats identified above. The following sections illustrate how climate change is multiplying existing pressures in various regions around the world. Since the EU's neighbours include some of the most vulnerable regions to climate change, e.g. North Africa and the Middle East, migratory pressure at the European Union's borders and political instability and conflicts could increase in the future. This could also have a significant impact on Europe's energy supply routes.

1. Africa: temperature rise & drought, sea-level rise (Nile delta) & migration,
2. Middle East: severe water scarcity
3. South Asia: Sea-level rise may threaten the habitat of millions of people as 40% of Asia's population (almost 2 billion) lives within 60km from the coastline. Changes in the monsoon rains and decrease of melt water from the Himalayas will affect more than 1 billion people.
4. Central Asia: water shortage impact on food production
5. Latin America and the Caribbean: melting glaciers, desertification, hurricane impacts
6. The Arctic: melting ice, new water was

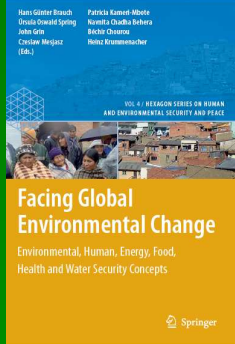
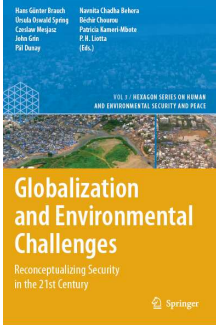
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# 8.10. Climate Change as a New U.S. National Security Threat

- P. Schwartz/Randall: Contract Study for DoD, Oct. 2003
  - Goal: “to imagine the unthinkable – to push the boundaries of current research on climate change so we may better understand the potential implications on United States national security.”
- Nils Gilman, Doug Randall, Peter Schwartz:
  - Impacts of Climate Change: A system Vulnerability Approach to Consider the Potential Impacts to 2050 of a Mid-Upper Greenhouse Gas Emissions scenario (January 2007);
- March 2007, the **Strategic Studies Institute** conducted a colloquium: “Global Climate Change: National Security Implications”
- March 2007, **Senators Richard J. Durbin (D-IL) and Chuck Hagel (R-NE)** submitted a bill requesting a **National Intelligence Estimate to assess whether and how climate change might pose a national security threat.**
- CNA: *National Security & the Threat of Climate Change* (April 2007)
  - Climate change can act as a threat multiplier for instability in some of the most volatile regions... presents **national security challenge for U.S.**
- November 2007, **Center for Strategic and International Studies (CSIS)**; the **Centre for a New American Security (CNAS)**: *The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change*
- November 2007, the **Council on Foreign Relations (CFR)** released a report on: *Climate Change and National Security* by Joshua W. Busby

# 8.11. Climate Change as a Problem of Human Security

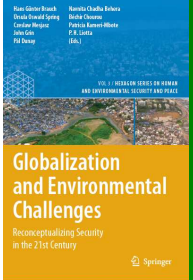


- **GECHS Science Strategy (1999): Global Environmental Change as a Problem of Human Security**
- **GECHS - Cicero Conference in June 2005: Climate Change and Human Security**
- **Ben Wisner, Maureen Fordham, Ilan Kelman, Barbara Rose Johnston, David Simon, Allan Lavell, Hans Günter Brauch, Ursula Oswald Spring, Gustavo Wilches-Chaux, Marcus Moench, and Daniel Weiner:**
- **Policy Memorandum by Scientists regarding the UN Security Council's first discussion on Climate Change : Climate Change and Human Security] (15 April 2007) at:**
- **<[http://www.afes-press.de/html/texte\\_presse.html](http://www.afes-press.de/html/texte_presse.html)>**

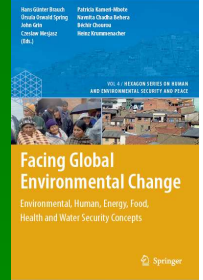
# 8.12. Nobel Peace Prize of 2007: IPCC & Al Gore



- Nobel Peace Prize for 2007 was shared, between the Intergovernmental Panel on Climate Change (IPCC) and Al Gore Jr. for their efforts to build up and disseminate greater knowledge about man-made climate change, and to lay the foundations for the measures that are needed to counteract such change.
- Indications of changes in the earth's future climate must be treated with the utmost seriousness, and with the precautionary principle uppermost in our minds. ... They may induce large-scale migration and lead to greater competition for the earth's resources. Such changes will place particularly heavy burdens on the world's most vulnerable countries. There may be increased danger of violent conflicts and wars.
- Through the scientific reports ..., the **IPCC** has created an **ever-broader informed consensus about the connection between human activities and global warming**. ... Whereas in the 1980s global warming seemed to be merely an interesting hypothesis, the 1990s produced firmer evidence in its support. In the last few years, the connections have become even clearer and the consequences still more apparent.
- **By awarding the Nobel Peace Prize for 2007 to the IPCC and Al Gore, the Norwegian Nobel Committee is seeking to contribute to a sharper focus on the processes and decisions that appear to be necessary to protect the world's future climate, and thereby to reduce the threat to the security of mankind. Action is necessary now, before climate change moves beyond man's control.**



# 8.13. Need for Anticipatory Learning and Proactive Policies



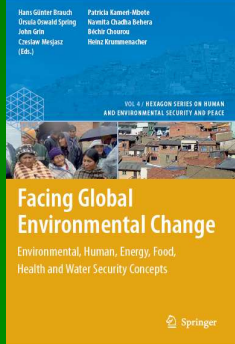
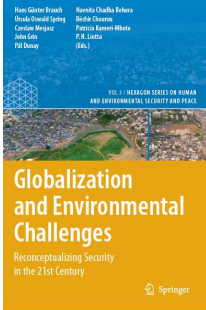
- **Different nature of security threats: terrorism vs. climate change**
- Enemy is ,us‘ and not ,they‘
- Cause is our economic behaviour and way of life based on waste of fossil fuels (coal, oil, gas)
- Securitizing actor: **Department of Defence**: worst case national behaviour, intentions, interests of states and non-state actors (terrorists)
- **IPCC**: knowledge assessment based on GC models and on sectoral & regional impact studies
- Role of Scientific Research: to identify the danger and communicate it to the media to citizens & policy makers
- We need an anticipatory research and learning to trigger proactive policies to face climate change impacts and to cope with them by adaptation and mitigation.
- This requires knowlege and technology sharing.

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

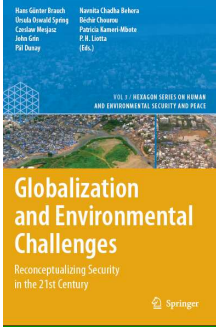
- **Primary Goal: address** extreme outcomes of GEC: hazards and disasters, migration, crises & conflicts that may have been caused, triggered, induced, influenced by: a) environmental stress and b) extreme weather events,
- **Enhance Environmental Security:** Address human behaviour that contributes 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.

# 9. The Audience of the Security Handbook: A Reference Tool

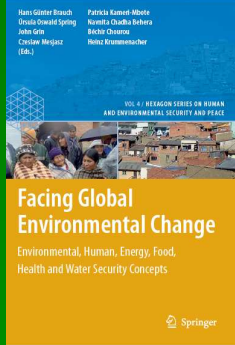
- Contributions were anonymously peer-reviewed.
- **Springer**: Second largest global science publisher with a high reputation for high quality books.
- Academic Institutions: university and research institutes globally
- Education and policy oriented training institutions
- National government bodies: foreign affairs, defence, development, environment, hazards & disasters
- Diplomatic and military academies globally
- Diplomats and officials at international organizations
- Educators and the Media
- Non-governmental organizations & social movements
- Religious bodies globally.





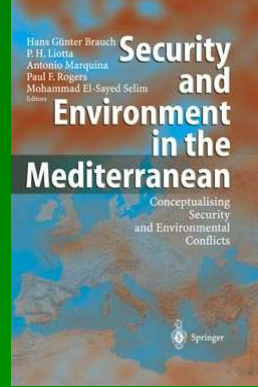


# 10. AFES-PRESS Bookaid Project for University Libraries in Developing Countries



- Goal: distribute globally produced knowledge by a team of authors for all parts of the world
- Reach out to students & professors in the South
- Major discount of the publisher for bookaid project for institutions in the South only
- 100% of grants reach the recipients
- Grantees and recipients will be documented on the web.

# 10.1. First Bookaid Project for University Libraries in Third World



In 2003-2004 AFES-PRESS sent 260 copies of vol. 1 to national & university libraries in more than 90 countries in

- Selected OSCE states,
- Middle Eastern countries
- in Africa, Asia & Latin America.



- Launch of Bookaid in Amman, Jordan
- December 2003



The book aid project was made possible by grants by:

- Berghof Foundation for Conflict Research, Germany (120 books)
- Public Diplomacy Division of NATO (117 books)
- Sparkasse Neckartal-Odenwald, Germany (11 books)
- Peter Dornier Foundation Germany (5 books)
- AFES-PRESS, Germany (19 books)



# 10.2. Second Bookaid Project for Third World University Libraries



- Prof. Dr. Klaus Töpfer, Former Executive-Director, United Nations Environment Programme (1997-2006) and former Under-Secretary General of the United Nations

From his foreword:

- “This book deserves many readers in all parts of the world, especially in those countries where university and research libraries may not be able to afford such references books. It is hoped that these scientific and policy-relevant messages can again be made available with the support of private foundations and donors to the young generation in the global South that will experience many of these challenges to their security and survival during this century.”

## Transfer of the first book gifts to the University of Nairobi, Kenya



## El Colegio de Mexico



## Kofi Annan Centre, Accra, Ghana

## **10.3 Co-Panelist:**

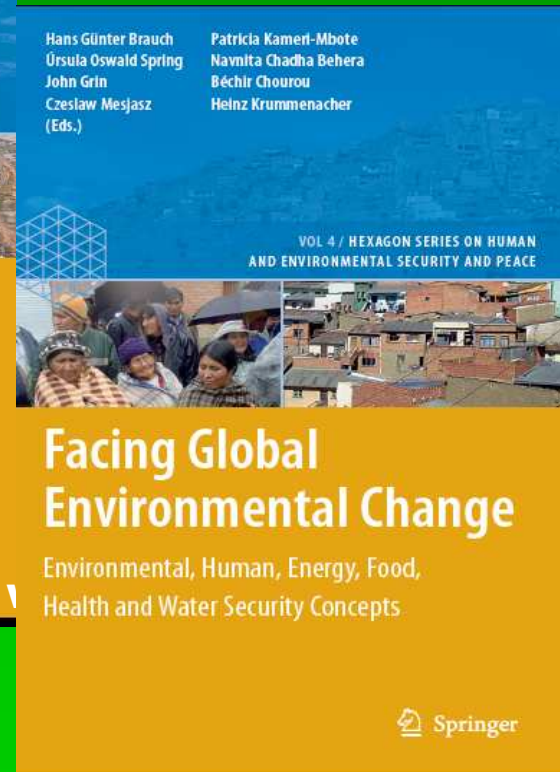
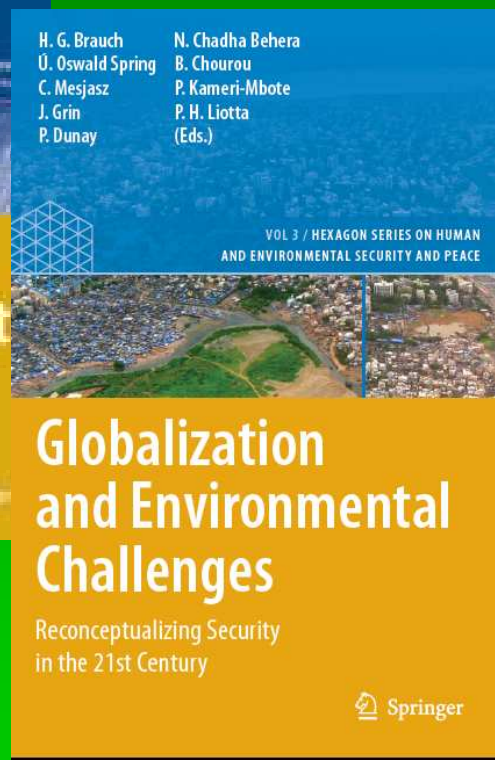
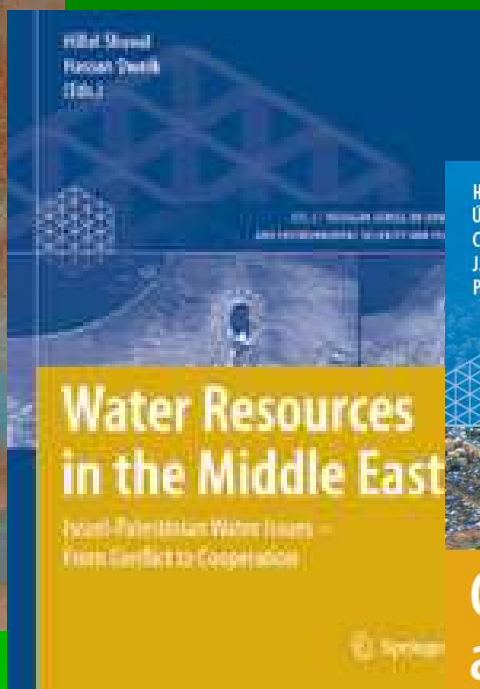
### **Jürgen Dedring (USA/Germany)**

- Since 1996 adjunct professor on global affairs at CUNY, in particular at the Graduate Center and at the City College, as well as at NYU in the School of Continuing and Professional Studies. He was born in Essen, Germany in 1939, secondary education completed in 1959, studied German, history, political science at the University of Freiburg and at the Free University of Berlin where he obtained the degrees of a 'Diplom-Politologe' (MA equivalent) at the Free University of Berlin in 1965; an A.M. in 1969 and a Ph.D. in 1974 in government at Harvard University.
- He taught at Harvard University and at Dartmouth College; he was a research associate at UNITAR, New York, 1972-1974,
- From January 1975 to August 1996 he was a political officer, at the UN Secretariat in New York where he chose early retirement in September 1996. He conducted research on international organisations, multilateralism, conflict prevention, conflict resolution and peacemaking; on European studies, including the European Union.

## 10.4 Co-Panelist: Mark Levy (USA)

- Marc Levy is deputy director of CIESIN; he continues to serve on an interim basis as associate director for Science Applications.
- His training is in political science, and he has published on environmental sustainability indicators, environment-security connections, the effectiveness of international environmental institutions, on social learning and environmental policy-making. At CIESIN he leads work on water-conflict linkages, anthropogenic drivers of emerging infectious diseases, climate vulnerability, and other projects seeking to understand human-environment interactions in a context of global change. He serves as lead project scientist of the Socioeconomic Data and Applications Center, and coordinates CIESIN's work for the Millennium Villages Project.
- Mr. Levy served as a convening lead author for the Millennium Ecosystem Assessment and the UN Environment Program's Global Environmental Outlook 4. He serves as a member of the Political Instability Task Force, and was a member of the National Research Council committee on "Land-use Change, Ecosystem Dynamics, and Biodiversity," which was part of the Decadal Study "Earth Science and Applications from Space: A Community Assessment and Strategy for the Future."

# 11. Bibliographic References



**Hexagon Series on  
Human, Environmental  
Security and Peace (HESP)**

<http://www.afes-press-books.de/html/hexagon.htm>



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