Earth Forum, Amman, Jordan

October 4, 2000

"The Relationship between Environment and Security"

Richard A. Matthew
University of California, Irvine, USA

Session 3: Emerging Environmental Conflicts–How Do We Deal with Them?

INTRODUCTION

- In the last decade there has been a dramatic escalation of research and policy activity focused on a cluster of ideas collectively referred to as "environmental security" issues.
- This activity is evident throughout the world.
- It involves a wide range of organizations, including universities, environmental NGOs, and government agencies.
- For example:

Representative List of Activities and Programs

- University of Toronto, Canada, 3 major research projects directed by Thomas Homer-Dixon
- *Peace Research Institute of Oslo, Norway, series of studies headed by Nils Petter Gleditsch*
- Global Environmental Change and Human Security, research offices in six countries, part of IHDP
- *Ecologic-Center for International and European Environmental Research, Germany, NATO study directed by Alexander Carius*
- Nautilus Institute for Security and Sustainable Development, USA, energy and security studies directed by Peter Hayes
- *Resources Conflict Institute, Kenya, focus on conflict resolution*
- State Failure Task Force, Phase II, USA, study of severe environmental stress and state failure
- *DAC-OECD, France and IUCN, Switzerland, State-of-the-Art Study of Environment and Security*
- Environment and Conflicts Project, Switzerland, studies headed by Gunther Baechler
- *Environment and Security in an International Context, study by NATO's Committee on the Challenges of Modern Society*
- Rethinking Security, Rethinking Development, Third Annual South Asian NGO Summit
- *Office of Environmental Security, Department of Defense, USA*
- Gore Environment and Security Cooperation bilaterals with ten countries

So: What is environmental security all about? Why so much interest?

HISTORICAL BACKGROUND

- There is a history behind this activity and it is shaped by real world events such as

Rachel Carson's *Silent Spring* in the 1960s, the use of defoliants in Vietnam in the 1970s, and the oil shocks of the 1980s.

- As concerns about natural resources and living systems increased, tentative links to national and human security were suggested in various articles, reports and speeches.
- Prominent among these were:

- Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification techniques
- Lester Brown, "Redefining National Security"
- Palme Report, "Common Security"
- Richard Ullman, "Redefining Security"
- Mikhail Gorbachev, "Comprehensive Security"
- Chernobyl
- Brundtland Report, *Our Common Future*
- Jessica Mathews, "Redefining Security"
- Norman Myers, "Environment and Security"
- *National Security Strategy of the United States*

But this discussion remained largely on the margins of the environmental, security and foreign policy communities until the 1990s.

TWO SIDES OF ENVIRONMENTAL SECURITY: RHETORICAL AND ANALYTICAL

So, although concerns about environmental change and security are not new--in fact in some sense they are as old as human history--the flurry of attention witnessed in the 1990s is unprecedented. It can largely be traced to a unique set of conditions:

- compelling evidence of severe and worsening human-generated environmental change in much of the world (e.g. Rio 1992)
- growing concern about the impacts of environmental change on social systems
- the desire to advance the environmental agenda during a period of great economic growth and resistance to strengthening environmental policy, especially in the United States
- the unrelated desire to protect defense budgets and find new foci for military and intelligence establishments after the Cold War

These conditions created an ideal context in which to introduce the powerful rhetoric and imagery of environmental security, while also stimulating interest in conducting research on the relationships between environment and security.

Environmental Security as a Rhetorical Device:

For some people in the environmental and policy communities, then, the concept of environmental security serves a powerful rhetorical function that can advance the environmental agenda while also helping the traditional security community. It is a language designed to:

- stimulate government and public attention by redescribing environmental challenges as security threats

- attract funding for environmental initiatives
- bring new stakeholders into environmental debates
- promote interagency and transnational dialogue
- act as the basis for forging new coalitions and partnerships

Additionally, this language might:

- reinforce efforts to “green” militaries
- serve as a pathway for reducing tensions in some regions

However, not everyone agrees with this optimistic assessment of ES’s rhetorical value. Critics worry that it:

- introduces a we versus they mentality into the environmental arena, undermining its historically collaborative spirit
- privileges the status quo, to the possible detriment of developing countries
- introduces what may become a new justification for military intervention and the use of force

obviously a highly charged term like “environmental security” is likely to be used in different ways by different groups for different ends.

success will be shaped in part by the claims advanced by researchers in this field; that is, it will depend in some measure on the analytical value of the concept

Environmental Security as a New Analytical Framework

researchers have focused on two general problems:

1. Environmental change and the role of the security community.

- what is the magnitude of environmental damage caused by military training, weapons testing, and war? (e.g. Arthur Westing, Murray Feshbach)
- can security assets, which are often extensive and include highly trained personnel and state-of-the-art technologies, be mobilized to assist with conservation management, environmental restoration and other environmental policy activities? (E.g. Medea Project and DCI Environmental Security Center in USA)

2. The relationships between environmental change (especially scarcity), violent conflict and security.

- this is the problem that has attracted the most attention
- on the one hand, a group of researchers (e.g. Homer-Dixon; Baechler) contend that environmental stress and scarcity can have a number of negative social effects, such as:

- reducing agricultural productivity, depressing economic performance, compelling people to migrate in search of livelihood opportunities, intensifying group identity tensions, forcing people onto marginal lands, and promoting resource

capture by social subgroups--all of which may generate diffuse and persistent misery, frustration and resentment

- rendering individuals and groups increasingly vulnerable to natural and human-made disasters
- overwhelming and disabling indigenous and state conflict resolution mechanisms
- and, finally, intensifying, triggering or causing violent conflict and social instability

on the other hand, a number of researchers (e.g. Simon, Gleditsch) argue that environmental stress and scarcity can have a variety of positive social effects, such as:

- promoting interagency and transnational dialogue
- promoting cooperation within and among societies
- providing a pathway out of violence and conflict
- above all, stimulating innovations that ultimately improve efficiency and contribute to a higher quality of life

why such disagreement?

- while there is some quibbling over definitions and some institutional biases at work, the empirical evidence suggests that (a) the social impacts of severe environmental stress do, in fact, vary across time and space, and (b) specifying these can be quite difficult because ecological-social relationships and phenomena such as conflict tend to be highly complex.

a number of questions have been raised in an effort to reduce the level of disagreement in the field:

- how often are the outcomes negative? [best answer: infrequent but growing]
- under what conditions are negatives outcomes likely? [best answer: in societies with a lack of ingenuity; poverty; weak governance institutions; and existing group identity conflicts]
- what are the local, regional and global trends in this regard? [best answer: the trends appear dangerous at many levels and in many parts of the world]
- can we identify at-risk situations early enough to take preemptive measures likely to be effective? [best answer: several early warning systems are under development–CIA, GECHS, NATO–but the abstract models they have designed have not yet been very successful; poor data is a major problem to such highly quantitative initiatives]

at the present we have only imperfect answers to these questions; nonetheless:

- there is a widespread belief that environmental change can have serious and dramatic social effects, which under certain conditions are apt to be very negative
- in other words, ecological and social systems are interdependent; changes in one will and do affect the other
- stresses between social and ecological systems are severe–and even worsening--in many parts of the world; sometimes this will stimulate innovation; other times it will be linked to violence and misery; a number of observers worry that the trend is towards an increase in the negative outcomes

- the full character and dynamics of these latter cases are not yet known and need further study; but most experts agree that we are well-advised to take some measures–such as better resource management--immediately

CONCLUSIONS

research conducted to date suggests several opportunities and areas of potential interest for the environmental community, acting on its own and also in partnership with government, business and the academic and research worlds.

Focus 1: acting on the relationships among resource management, human livelihoods and security

e.g. bringing diverse groups together to discuss these issues

Focus 2: using the environmental security framework to assist in establishing conservation priorities

e.g. identifying urgent problems and regions where an immediate focus on resource management and the protection of living systems might reduce the likelihood of the negative social effects noted earlier

Focus 3: using field experience to improve understanding of the dynamics of environmental security

e.g. contributing insights and expertise to the academic and policy debates

Focus 4: improving data quality

e.g. focusing on data collection and enhancement in key areas such as cropland, pasture, forest cover and fisheries