

Environmental Security

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Introduction

The relationship between environment and security has been under consideration since the 1980s mainly by two groups: (1) the environmental policy community, addressing the security implications of environmental change and security, and (2) the security community, looking at new definitions of national security, particularly in the post-Cold War era.

It was soon acknowledged that global impacts of for example environmental change, the depletion of the ozone layer and transboundary pollution, have clear security implications. This in turn made the military authorities to re-evaluate the security dimension of environmental issues.

Security was traditionally seen as a synonym for national security with two main objectives: (1) to preserve the territorial integrity of the State and (b) to maintain the preferred form of government, by political and military means.

When political scientists took up the environmental aspect of security, they defined environment impacts as being part of the security issue. This approach attempted to re-define the concept of national security completely. In the early 1980s the Independent Commission on Security and Disarmament Issues (ICSDI) developed and introduced the concept of common security, giving the idea of national security a broader perspective. Additional to the traditional security aspects, other non-traditional threats to security, e.g. economic decline, social and political instability, ethnic rivalries and territorial dispute, international terrorism, money laundering and drug trafficking as well as environmental stress, have been incorporated.¹

The World Commission on Environment and Development² clearly linked security with environment in its 1987 Brundtland Report: "Humankind faces two great threats. The first is that of a nuclear exchange. Let us hope that it remains a diminishing prospect for the future. The second is that of environmental ruin world-wide and far from being a prospect for the future, it is a fact right now."⁴

Following this inter-linkage the General Assembly officially introduced the concept of security and environment at its 42nd Session.³

In recent years environmental security has been understood extensively, including human, physical, social and economic well being, giving the scope hardly any limitation for interpretations.⁴ At present, however, there is no consensus on a clear definition of environmental security.

For the purpose of this paper, the scope of the issue is limited on how environmental impacts may affect conflicts, rather than security as such.⁵ In this respect, environmental security has basically two dimensions: environmental stress may be a cause as well as a result of a conflict.

Environmental Stress as Cause of a Conflict

Environmental stress, i.e. global impacts of for example environmental change, the depletion of the ozone layer and transboundary pollution, may lead to a conflict.

History has shown a large variety of examples of conflicts caused by global impacts with environmental roots.⁶ The following brief description of four cases from South America/Caribbean, Africa and Asia are examples of a clear relationship between environment and security:

Deforestation on the Philippines

The main sectors of employment on the Philippines are agriculture, forestry and fishery. The natural resources have been widely depleted through deforestation, soil erosion, watershed abuse, over-fishing and coral reef destruction. An ever-growing population shares the decreased natural resources.

Anti-government rebels, e.g. the New People's Army, take advantage of these declining conditions. They control a large part of the territory. Governmental campaigns against the rebels often do not reflect the minds of the rural communities disenchanted with the degradation of the environmental basis of their livelihood. The result is a lack of security and may even result in open conflict.

Deforestation in Ethiopia and Somalia

In the 1960s, as a result of deforestation and favoured by improper agricultural practices and population increase, there was a widespread soil erosion in Ethiopia's Highlands. The result was decline of farmland, inefficiency of agriculture, food shortages and exploding prices leading to urban riots. The neighbouring Somalia had to face similar problems.

Most of Somalia's rivers rise in Ethiopia, and Somalia worried that Ethiopian migrants might divert water for irrigation. In 1977 the two countries went to war until 1979. Supported by the late superpowers with supply of arms, the region could not yet recover properly.

Deforestation in the Caribbean

The problem of deforestation as described above is quite similar in Haiti. Already in 1978 the President's Council on Environmental Quality warned that in Haiti deforestation was almost complete and that resulting firewood shortages and cultivation of marginal soil would promote social disruption and instability. The depletion of forests, soils and water supplies in El Salvador and a population density of six times that of

neighbouring Honduras, are possible factors of future instability.

Water in the Middle East

In the 1950s there was a comprehensive plan for the co-operative use of the Jordan River waters (the Johnston Plan), which failed because of mistrust among the four bordering states (Israel, Jordan, Lebanon and Syria). Since then each state has tended to follow its own water policies.

The militarisation of water conflicts is not of recent nature. On numerous occasions, Israel and its neighbouring Arab states have feuded over access to Jordan River waters. Former Israeli Minister for Agriculture Rafael Eitan stated in November 1990 that Israel must never relinquish the West Bank because a loss of its water supplies would "threaten the Jewish State." Many military moves in that region were at least motivated by water supply, e.g. 1967 occupation of West Bank, the Golan Heights and the Gaza Strip.

Action by the International Community

Since the UN General Assembly introduced environmental security in the mid-late 1980s,⁷ many institutions dealt with the issue, e.g. UNEP, OSCE and NATO.

United Nations Environment Programme

UNEP first dealt with environmental security in the joint PRIO/UNEP Programme on Military Activities and the Human Environment in the 1980s. In 1988 an ad hoc experts' meeting on expanded concept of international security⁸ was organised by UNEP, followed by the international symposium "Towards a comprehensive system of international security" which was co-sponsored by UNEP.⁹ The main emphasis of this framework was to explore the interrelationship

between environmental security and comprehensive international security. As a follow-up the PRIO/UNEP Programme published a booklet on 'Environmental Security - A Report Contributing to the Concept of Comprehensive International Security'.¹⁰

The General Assembly Resolution 42/186 mandated UNEP to deal with the issue; Paragraph 86 of the Resolution reads: "One of the roles of the United Nations Environment Programme is to promote environmentally sound development in harmony with peace and security, and towards this end, issues of disarmament and security, in so far as they relate to the environment, should continue to receive appropriate attention."

The United Nations Task Force on Environment and Human Settlement addressed the issue in its 1998 Report: "[...] Monitoring and assessment are closely linked to early warning of possible environmental emergencies through the prediction of extreme events or unusual environmental conditions. This kind of warning is extremely valuable for environmental and economic decision-makers; for example, advance warning of drought conditions can enable farmers to plant drought-resistant crops. It may be possible to identify, on a long-term basis, potential 'hot spots' or areas that are likely to be subject to rates of change that exceed the limits of sustainability and thus pose threats to regional or global security.

Recommendation 10

The Task Force recommends that UNEP and Habitat design and maintains the system of information, monitoring and assessment so as to maximise its ability to provide early warning of possible environmental and human settlement emergencies. It further recommends that UNEP consider establishing a capability to identify potential environmental and environment-related conflicts and provide information and analysis to guide the development of preventive measures, for example by the negotiation of joint actions. [...]"¹¹

Organization for Security and Co-operation in Europe

In 1999 the Organization for Security and Co-operation in Europe (OSCE) addressed 'Security Aspects in the Field of the Environment' at its Seventh Meeting of the Economic Forum.¹² Moreover, the OSCE intends to organise an additional workshop on 'Policy Approaches to Environment and Security in the OSCE Region'.¹³

North Atlantic Treaty Organisation

The North Atlantic Treaty Organisation (NATO) and its Committee on Challenges of Modern Society (CCMS) organised a workshop on 'Environmental Security in an International Context: Environment and Development Policy Responses'.¹⁴ The workshop recognised monitoring compliance as a crucial issue in environmental politics and stressed the need for capacity building as a major part of a strategy to combat environmental threats to security.

At the Plenary Meeting of the NATO/CCMS in 1995 a pilot study on 'Environment and Security in an International Context' was launched.¹⁵ In March 1999 the final report was published, summarising the relationship between environmental change and security at the regional, international and global levels. The Pilot Study was co-chaired by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Department of Defense (DoD) of the United States of America.

Conclusion

The security issues should, beside traditional political and military aspects, also include environmental issues. The significance of environmental security extends far beyond the environmental sector as such. Environmental degradation, resource depletion and natural disasters may have direct implications for the security of individual States, group of States and of the international community as a whole. Hence, a

comprehensive threats assessment, a risk analysis, as well as a prioritisation of risks to international security is needed.

Following these needs, countries could mandate UNEP to co-operate with regional military organisations (e.g. NATO, OSCE, and WEU) and with national military forces in general. An exchange of views on an informal basis, e.g. by sending experts to such regional military organisations as well as by inviting military forces to take environmental issues into consideration to further define the scope of environmental security. This approach would allow to use the political attention and resources spent on the military sector in order to strengthen environmental security related initiatives.

The impacts of environmental damage can pose a threat to either global security or to regional security. At the regional level, security may be threatened as a result of the unsustainable use of shared natural resources, or because of transboundary pollution. In such instances concerted preventive actions might be appropriate and adequate. As solutions may come at a later stage, however, an inventory of potential environmental hot spots should be established. Moreover monitoring and co-ordinating regional environmental co-operation in areas of actual or potential insecurity (hot spots), exchange of information and even joint management could be required.

At the global level, the environmental security can be strengthened by: (a) preventing or mitigating global environmental degradation; (b) managing the global commons; (c) preventing and managing global risks; and (d) collecting and exchanging information on schemes of global environmental co-operation.¹⁶

To achieve environmental security, it requires support action in the following areas: (a) education, training and exchange of information; (b) capacity building in elaboration of national and international law. This would be best achieved through defining ecological regions and international institutions.¹⁷

References

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¹ Cf. e.g. T.F. Homer-Dixon, On The Threshold: Environmental Changes as Causes of Acute Conflict in: International Security, Vol. 16, No. 2 (fall 1991), pp. 76-116.

² Cf. GA Res. 38/161 (19 December 1983) 'Process of preparation of the Environmental Perspective to the year 2000 and Beyond'.

³ UN GA Res. 42/186 (11 December 1987) 'Environmental Perspective to the Year 2000 and Beyond', Par. 82 *et seqq.*

⁴ For a comprehensive overview of research projects and different approaches, cf. NATO/CCMS, Environment and Security in an International Context, Final Report (March 1999).

⁵ World Commission on Environment and Development, Our Common Future, (Oxford: Oxford University Press 1987); U.S. National Academy of Science, Policy Implications of Global Warming, (Washington D.C. 1991).

⁶ For example: El Salvador (1969); The Sahel (1973, 1985, and 1991); Ethiopia -Somalia (1977); Somalia (1990s); Haiti (1990s) and Rwanda (1994).

⁷ Cf. e.g. UN Doc. A/40/553 (1986) 'Concepts of Security'; UN GA Res. 42/93 (7 December 1987) 'Comprehensive System of International Peace and Security'; UN GA Res. 42/186 (11 December 1987) 'Environmental Perspective to the Year 2000 and Beyond', Par. 82 *et seqq.* [Security and Environment].

⁸ Nairobi (Kenya), 23-26 February 1988.

⁹ Moscow (Russia), 28 November-1 December 1988.

¹⁰ Cf. PRIO/UNEP, Environmental Security - A Report Contributing to the Concept of Comprehensive International Security (December 1988).

¹¹ UN Doc. A/53/463 (6 October 1998) 'Report of the Secretary-General on Environment and Human Settlements',

Annex 'Report of the United Nations Task Force on Environment and Human Settlements', Paragraph 41.

¹² Prague (Czech Republic), 25-28 May 1999; cf. OSCE Doc. EF.GAL/3/99 'Summary' (26 July 1999).

¹³ OSCE Doc. EF.DEL/87/99 'Rapporteur's Report: Informal Group "Environmental Security" at the 7th OSCE Economic Forum on "Security Aspects in the Field of the Environment", May 25-28, 1999 in Prague' (28 May 1999).

¹⁴ Vienna (Austria), 22-23 March 1998.

¹⁵ Washington, D.C. (United States), 14 November 1995.

¹⁶ Note 11, pp. 18 *et seq.*

¹⁷ Note 11, p. 20.