

Environmental Change as Security Dilemma and its Institutional Implications

Serhat Ünaldi

Institute of Asian and African Studies, Humboldt-Universität zu Berlin.
E-Mail: serhat.uenaldi@hu-berlin.de

Abstract

Climate change poses a threat to the security and well-being of people in all countries. Their governments are entrusted with the task of guaranteeing this security in the face of unusual weather phenomena, extreme climatic conditions and conflicts resulting from scarcity and climate-induced migration. Whereas traditional security threats took the form of inter-state conflicts and have often been met at the national level – for example through military means –, climate change as a global phenomenon seems to call for new types of action. Some have argued for an overhaul of political institutions to meet the climate challenge. Solutions offered range from world government to decentralized sub-state entities. Yet, as will be argued, climate change is imminent and needs to be tackled now. This leaves little room for Utopian political visions. In discussing different approaches developed in the field of International Relations as they relate to climate change and security, this article argues for an acknowledgement of climate change as a new type of security dilemma. It then proceeds to defend the suitability of current international institutions for solving problems posed by climate change. Firstly, they are the only institutions currently available. Secondly, they are both immune to overt centralization as well as big enough to develop and implement sustainable solutions. Most hope lies with clusters of countries working together and setting examples that might eventually be followed elsewhere.

‘The Earth is one but the world is not.’

(World Commission on Environment and Development 1987)

1 Introduction

In an episode of the U.S. cartoon series *The Simpsons* (2006) the dilemma of environmental security is vividly illustrated: In order to win over elementary school students for military service, recruiters try to lure them with a promotional film depicting the heroic actions of American soldiers. In one scene, a helicopter shoots rockets at Nazis, Islamic terrorists, a fictional mass murderer and, finally, a 'deadly hurricane' to save the world from evil.

To the producers of *The Simpsons*, American faith in military power to deal with security risks seemed particularly misplaced in the wake of the many lives lost due to Hurricane Katrina in 2005. The short scene condensed a relevant critique: It is absurd to believe that the very real threats to the well-being of humans posed by climate change can be countered by traditional means of power.

Given that the latest installment of the James Bond film series (*Quantum of Solace*, 2008) likewise centered on a story about environment and security where a mafia uses control over water to influence political developments in South America, it seems as if the question of global environmental change representing a new type of security dilemma, has already been answered in the affirmative even by the most mainstream of media. Yet, whereas the traditional security dilemma, defined as an arms race that more often than not stands in the way of trust between the nation-states involved, occupies an established place within International Relations (IR) theory, the challenges climate change poses to global security and international institutions deserves more attention, notable exceptions include Homer-Dixon (1991), Kaplan (1994) and Dyer (2001). This paper then presents and uses IR debates and theories to elaborate on the connection between climate change and security and, continuing from that, to discuss whether new global political structures are needed to deal with the security threat resulting from environmental change.

As the World Commission on Environment and Development cited above notes, climate change is a global phenomenon whereas nations are local entities. Already some countries are trying to build dams for national water storage to prepare themselves for extensive draughts to the disadvantage of neighbouring countries downstream. Such examples are readily taken up by defenders of political realism who use them in their arguments about the dominance of national interests in international relations. But, as will be argued, realists do struggle when it comes to explaining the extensive cooperative efforts under existing international frameworks on climate change.

Considering the global nature of the threat and the presently slow and inefficient decision making processes, a change in the organizing principles of international politics to effectively tackle the ecological challenge seems to make sense. Yet, the argument here is that nation-states will not disappear in the near future whereas environmental problems have to be tackled now. That is why, for the time being, the most feasible solution to deal with the environmental security threat is to increase international cooperation instead of aiming for utopias governed by supra- or sub-national

political structures. As will be argued, current multilateralism seems to provide the most promising and feasible approach.

2 The Earth Strikes Back – The Environmental Security Threat

“It is time to understand the environment for what it is: the national-security issue of the early twenty-first century” (Kaplan 1994).

In his now famous essay about ‘The Coming of Anarchy’, Robert Kaplan (*ibid.*) predicts that ‘[e]nvironmental scarcity will inflame existing hatreds and affect power relationships’. Referring to problems like desertification and deforestation in Africa and the resulting migration into urban centers, Kaplan calls for an acknowledgement of ecological depletion and climate change as central issues of future security and defense policy. According to Kaplan, urbanization accelerated by the deterioration of rural environments leads to the proliferation of slums, crimes and extremism. As examples he cites ‘intercommunal violence’ in Bombay and Islamic extremism in Iran which he regards as a ‘psychological defense mechanism of many urbanized peasants threatened with the loss of traditions in pseudo-modern cities where their values are under attack... and where they are assaulted by a physically unhealthy environment’ (Kaplan 1994).

With such bleak prophecies, Kaplan was not the first analyst to speak of environmental degradation in terms of security. Not just migration but also a growing number of international disputes about control over scarce resources, such as river water, has been mentioned in this context. As one of the leading scholars in the field, Homer-Dixon (1991, pp.77-78) has summarized potential repercussions of environmental change on international security, among them a growing disparity between the global North and the South with an increased potential for armed conflict, disputes over access to resources in an ice-free Antarctic, environmental refugees, urban-rural civil wars and the aggravations of class and ethnic cleavages. He distinguishes three types of conflicts (*ibid.*, pp.106-111):

1. Simple scarcity conflicts over resources
2. Group-identity conflicts among different cultural groups triggered by migration
3. Relative-deprivation conflicts caused by a declining wealth production due to the impact of climate change.

The new character of this threat has been noted time and again, for example by Dyer who writes that the

“traditional preoccupation with politico-military notions of security as between states [...] ‘is readily unseated whenever the image of the state as a referent object for security fades’ (Buzan 1991, p.103) because a novel source of insecurity, such as global environmental change, is not recognizable. Certainly, ‘territoriality’ and ‘impermeability’ go out of the window in the context of transboundary environmental change” (Dyer 2001, p.442).

As for the environment, security can by no means be provided by single nation states since clouds and winds are blind to military strength and do not care much about sovereignty. This however does not necessarily mean that states will soon renounce their national interests for the sake of global environmental security. In fact, one of the defining features of the traditional security dilemma, i.e. a lack of mutual trust between governments, persists: if one government spends money and shoulders the economic costs to cut emissions, how can it be sure that a “dirty” country won’t use its competitive advantage, e.g. cheap production costs, to harm it?

The question of trust becomes even more relevant when it comes to devising strategies for climate change adaptation. Simple scarcity conflicts may have a lot in common with the traditional security dilemma as exemplified by Turkey’s Southeastern Anatolia project which involves the building of twenty-two dams along the Euphrates and Tigris rivers and effectively leads to Turkish control over ‘[m]uch of the water that Arabs and perhaps Israelis will need to drink in the future’ (Kaplan 1994). In such a case we may be witnessing the transformation of the traditional security dilemma to an ecological variant where nations are racing to get in control of scarce resources that may be used in future as a power tool, not unlike military might before.

However, due to the extensive and unforeseen effects of climate change it is doubtful that a single state in control over river water would not face a shortage or damage caused by environmental degradation in another field. In short, whereas the possession of weapons may be an effective means to provide traditional security, local control over water is not effective when, at the same time, other parts of the country are suffering under droughts, famines, ultraviolet rays, rising sea levels, fires, hurricanes or blizzards. Climate change will affect all countries, even those who race to get hold of – and store – as many resources as possible.

In disregard of these considerations, some critics doubt that the environment and security are connected at all. These anti-Malthusians are critical of the thesis first uttered by Thomas Malthus in the 19th century, whose ‘principles of population’ were meant as a warning of the finite capacity of the earth to sustain population growth. Homer-Dixon for example mentions US demographers and economists who have attacked his findings on the connection between environmental change and conflict. These critics argue ‘that “resources aren’t very important anymore” (because of the modern ability to substitute among resources), so they are unlikely to be a key source of conflict ’ (in Homer-Dixon and Levy 1995, p.191). Although in recent years voices that call for the discursive

marginalization of the environment pertaining to matters of security have become fewer, some are calling for disjoining the environment and security for different reasons.

Levy (1995, pp. 43-45) notes that ecologists tend to follow a strategy of pushing the environment from ‘low politics’ to ‘high politics’ in relating it to matters of security. Although he contends that ‘[d]irect physical threats provide the most compelling rationale for considering environmental degradation to be a security risk’ and that a ‘thinning of the ozone layer that threatens to kill and blind hundreds of thousands of Americans is easy to identify as a security risk’ (Levy 1995, p.46), he nevertheless asks if it is always wise to paint environmental problems as a security matter. If desertification in West-Africa leads to increased conflict in that region, this triggers mainly local migration and, at most, a European refugee problem. But why should, for example, Americans care? Here, it might be better to integrate desertification into a wider humanitarian discourse in order to arouse broader concern.

This point may be valid, but only when it comes to single and easily identifiable cases of environmental change and the effects it triggers. But in the face of the overall picture one gets when the puzzle of separate catastrophic events around the globe is put together is certainly one of a security threat that duly deserves a rank among “high politics”. Hence, despite his objections, Levy’s general argument is that something on a large scale has to happen to counter this very real security risk:

[W]e need a policy-making style more like defense policy than environmental policy. Climate change is a problem [...] like the problem of containing the Soviet Union; it requires a grand strategy to guide actions in the face of distant, uncertain threats [...] (Levy 1995, p.54).

3 Institutional Structures and Climate Change

In the world of political realism, Kaplan’s bleak doomsday predictions in ‘The Coming of Anarchy’ seem to follow convincingly from environmental change. Only recently has the failure of the UN Climate Change Conference in Copenhagen proven again that national interests often stand in the way of concerted action. And yet international environmental cooperation is one of the most convincing examples to prove that realism is only one among other, more optimistic, schools of thought that can be used to explain phenomena of global interaction in the face of climate change.

International efforts to tackle the environmental challenge were kick started in Stockholm in 1972 with the United Nations Conference on the Human Environment (UNCHE). The ‘Earth Summit held in 1992 in Rio de Janeiro, the ‘Earth Summit 2002’ in Johannesburg and Copenhagen in 2009 are only the most well-known follow-up efforts, accompanied by annual climate change talks as well

as hundreds of treaties and agreements. And whereas IR theorists with a neo-liberal outlook as well as ‘Habermasians’ who put their faith in communicative reason have to explain the resistance of nations like China and the USA to commit to broad and binding treaties, realists have to invest much effort into explaining how such an elaborate international treaty as the Kyoto protocol could have come about in the first place, namely through a striking example of international cooperation.

However, even those who acknowledge and applaud current cooperative efforts – most of them in the tradition of neo-liberal institutionalism (Jakobsen 1999, p.207) – have suggested a reform of current structures in order to increase effectiveness. As Plant (1990, p.413) puts it: ‘There is a fear that an international institutional “organization crisis” will develop in tandem with the aggravation of environmental threats.’ The enhancement of the United Nations Environment Programme (UNEP) through increased funding or by turning it into a more powerful agency has been suggested (Plant 1990, p.422). More radically, the Commission on Global Governance (1995) recommended that the now obsolete UN Trusteeship Council ‘should be given a new mandate over the global commons in the context of concern for the security of the planet’. Former Soviet Foreign Minister Shevardnadze went a step further:

Since we are speaking of a major component of international security, I would add that political ecology requires the involvement of the Security Council in solving problems and activating such tools as transparency and strict international monitoring (cited in Plant 1990, p.424).

Plant remarks that such an Environmental Security Council could be at best an executive body which would ‘properly be limited to the relief management of specific environmental disasters at most’. However, one could argue against such objections that conflict prevention is increasingly discussed as a role for the Security Council. Then why should the prevention of disasters not too be a task of a potential council for the environment? The creation of such a UN body would finally recognize the environment as equal in importance to questions of peace and traditional security as well as economics and development.

Yet more radical advocates of world government would not be content with a mere institutional modification as they call for a ‘supra-state which can transcend the narrow aspirations of diverse states’ (Wapner 1995, p.51). Many critics of such a proposition have pointed to its insufficiency as it would in fact not diminish the influence of sovereign states but that

“interstate political struggles would be encompassed within the [new global] organization – governments would seek to appoint to high office officials sympathetic to their arguments or blandishments, and even the empty pronouncements of the organization would require time-consuming meetings to negotiate. [...] We cannot wish away state

sovereignty, any more than nationalists can dispel the reality of international environmental interdependence” (Levy et al. 1995, p.417).

Acknowledging the salience of state sovereignty is important but easily leads down the path to realism, where no room is left for explaining current and future cooperation that reaches beyond the narrow interests of single states. Interestingly, it is among proponents of world government where answers to the tensions between the need for a global outlook and national institutions are to be found. Archibugi (2008, p.121) as one of the most vocal promoters of cosmopolitan democracy admits with regards to the Kyoto Protocol that here ‘states have entered into undertakings with other states, which can enforce the agreements through a battery of instruments that would not be available to newborn cosmopolitan institutions’. This is true, and it is exactly this process of negotiating diverse interests and implementing agreements locally that may prove more effective than any centrally imposed solution devised by a single world government detached and removed from conditions on the ground.

Advocates of solutions devised by a world government ‘jump too far into a projected future to be likely to carry most states and peoples’, and thus it is more feasible to envisage a ‘unit-driven transformation from below, rather than a system-imposed transformation from above that seeks recalcitrant units to adapt’ (Eckersley 2004, p.200,201), not to speak of the ‘potential for domination that is inherent in all universalizing perspectives’ (*ibid.*, p.191).

Another revolutionary approach would be to argue for the opposite: A sub-state solution, propagated mainly by eco-anarchists who hold that ‘[c]entralisation is responsible, in great measure, for current ecological problems’ and that ‘greater degrees of scale and power overwhelm the human ability to understand and control economic, political and social processes’, whereas the ‘true state of nature finds human beings cooperative, caring and socially conscious’ (Wapner 1995, pp. 57-58). Yet, this kind of social romanticism makes the approach vulnerable to criticism. When, in this context, Schumacher (1973 cited in Wapner 1995, p. 60) pleads for worldwide ‘Buddhist economies’ he does so without examining the state of the environment in countries whose cultures are heavily influenced by Buddhism. The economies of most of these countries have taken a strong capitalist turn, thereby proving that hopes for the emergence of idealized and mystified alternative economic models often amount to nothing more than wishful thinking. When it comes to Buddhist societies and the environment, the numbers are disheartening. For example, according to the UN Human Development Report on climate change (UNDP Thailand, 2007), ‘Thailand ranks among the top 30 carbon dioxide polluters in the world and the seventh highest overall in Asia, while its per capita emissions are higher than China, India and Indonesia’.

To mention another potentially negative repercussion of the ‘small is beautiful’-approach: Not far from Thailand, in the Philippines, analysts have noted the disadvantages of extensive decentralizing measures taken by the government: Local elites took advantage of the devolution of power

whereas unorganized local people followed a value-orientation that was not always in line with green communitarian ideals either (Contreras 2000, p. 158). Although Eckersley (2004, p. 190) is right when she writes that '[w]ithout knowledge of and attachment to particular places and species, it is hard to understand how one might be moved to defend the interests of persons, places, and species in general', it is nevertheless far from true that excessive localism would solve any of the pressing problems.

Having examined more Utopian suggestions, multilateralism suddenly seems best suited to confront the environmental challenge since it is both, global and local. Soroos is confident that the Prisoner's Dilemma, which holds that in matters of traditional security 'rational calculations of self-interest result in sub-optimal outcomes' (Soroos 1994, p. 316), might not apply when it comes to environmental cooperation:

The costs of preventing global warming through strategies such as energy conservation may not be nearly as burdensome as is widely assumed, especially when balanced out against the costs of climate change. [...] Thus, there is reason for some hope, if not optimism, that the logic of the Prisoner's Dilemma will not prevail [...]. (Soroos 1994, p.329)

Even if they lack enforcement powers, regimes and institutions emerging from international cooperation have at their disposal a wide scope of action to improve 'the three Cs' – concern, contractual environment and capacity –, as Keohane, Haas and Levy (1995, pp.22-24) note. They can offer rewards or punishments through funding or threats of sanctions and provide information to states or work together with national NGOs to increase pressure on reluctant governments to foster *concern*. The *contractual environment* can be improved by effective monitoring measures in order to reduce fear among states of being cheated by other members, whereas capacity building is done by skills transfer and financial aid.

Reverting to critical theory in search of an emancipatory institutional framework, Eckersley argues for a 'transnational state' that is integrated in international multilateral action but retains its feature of being a local entity. She writes that 'there is no reason why domestic legal systems cannot be enlisted to serve transboundary communities when such communities [...] are given the opportunity to be both the authors and addressees of common transboundary norms' (Eckersley 2004, p.248). An institutional framework that retains the state and existing national communities profits from both, the benefits of local and global action as it 'leaves room for retreat to the particular to enable the sovereignty discourse to be enlisted in environmentally defensive ways' since when global flows lead to local pollution 'then such flows ought to be resisted on the grounds that they undermine the territorial integrity [...] of national communities [...]' (Eckersley 2004, pp. 248-249). Eckersley writes

that, for now, an encompassing global democracy is not achievable, but that certain networks of states can take on leadership roles and invite others to emulate or join them:

[O]nly where zones of affinity emerge among particular groupings of states – such as in the European Union – [...] a genuine transnational democracy becomes possible. [...] To the extent to which such green clusters grow or are copied elsewhere, it ought to be by respectful persuasion or example [...]. (Eckersley 2004, p.201).

Such a down-to-earth approach seems to be both, feasible and effective, especially with the recent rise of a new and inclusive international grouping, the G-20, which nevertheless has failed so far to prioritize climate change as its agenda is still confined to narrow economic issues. It is to be hoped that this will change sooner rather than later.

Of course, the preference for a ‘transnational state’ does not mean that more creative measures should not at least be discussed. As mentioned above, an Environmental Security Council could lift the issue to its rightful position. Furthermore, something like an ‘International Green Court’ could be established where people would be able to charge polluters because local environmental crimes always have global repercussions. Thus, everyone should be endowed with universal rights against such crimes.

4 Conclusion

Global security problems – and, as was shown, environmental change poses a new security threat – seem to call for global institutions. However, a supra-statist order is not within reach and may not even be desirable. The conditions on the ground and the urgency of the problem do not allow mankind to wait and hope for a world government to emerge in time. To the contrary, the aim – and this already is quite a challenge – would have to be working through, maybe altering and adding to, existing institutions, strengthening international environmental regimes and hoping that by way of such cooperation amongst states a sense of trust and togetherness might develop which could eventually lead to more global governance. Unfortunately – but not surprising to critics of the Westphalian system who see a correlation between environmental degradation and sovereignty – global warming hits the world at a time when nations still dominate international politics and not when the world acts as one or on the other extreme retreats into small-scale, decentralized communities. Nevertheless, the environmental challenge provides incentives for coming together. It already seems as if less and less people believe that – as the fictive U.S. military in the world of *The Simpsons* – traditional unilateral security measures can effectively solve the challenges ahead.

References

- ARCHIBUGI, D. 2008. *The Global Commonwealth of Citizens: Toward Cosmopolitan Democracy*. Princeton, Oxford: Princeton University Press.
- BUZAN, B. 1991. *People, States and Fear*. Hemel Hempstead, UK: Harvester Wheatsheaf.
- COMMISSION ON GLOBAL GOVERNANCE. 1995. *Our Global Neighborhood: Report of the Commission on Global Governance* [online]. Available at: <http://www.sovereignty.net/> (Accessed 28 December 2008).
- CONTRERAS, A.P. 2000. Rethinking Participation and Empowerment in the Uplands. In: P. Utting, ed. *Forest Policy and Politics in the Philippines: The Dynamics of Participatory Conservation*. Manila: Ateneo de Manila University Press, pp. 144-170.
- DYER, H. 2001. Environmental Security and International Relations: The Case for Enclosure. *Review of International Studies*, 27, pp. 441-450.
- ECKERSLEY, R. 2004. *The Green State: Rethinking Democracy and Sovereignty*. Cambridge/MA, London: Massachusetts Institute of Technology Press.
- HOMER-DIXON, T.F. 1991. On the Threshold: Environmental Changes as Causes of Acute Conflict. *International Security*, 16(2), pp. 76-116.
- HOMER-DIXON, T.F. and M.A. LEVY. 1995. Correspondence: Environment and Security. *International Security*, 20(3), pp. 189-198.
- JAKOBSEN, S. 1999. International Relations and Global Environmental Change: Review of the Burgeoning Literature on the Environment. *Cooperation and Conflict*, 34(2), pp. 205-236.
- James Bond: Quantum of Solace*. 2008 [motion picture]. USA: MGM, Columbia Pictures.
- KAPLAN, R.D. 1994. The Coming of Anarchy. *The Atlantic* [online]. February, [Accessed 2nd January 2009]. Available at: <http://www.theatlantic.com/>.
- KEOHANE, R.O., P.M. HAAS and M.A. LEVY. 1995. The Effectiveness of International Environmental Institutions. In: P.M. HAAS, R.O. KEOHANE, and M.A. LEVY, eds. *Institutions for the Earth: Sources of Effective International Environmental Protection*. Cambridge/MA, London: Massachusetts Institute of Technology Press, pp. 3-24.
- LEVY, M.A. 1995. Is the Environment a National Security Issue? *International Security*, 20(2), pp. 35-62.
- LEVY, M.A., R.O. KEOHANE and P.M. HAAS. 1994. Improving the Effectiveness of International Environmental Institutions. In: P.M. HAAS, R.O. KEOHANE, and M.A. LEVY, eds. *Institutions*

for the Earth: Sources of Effective International Environmental Protection. Cambridge/MA, London: Massachusetts Institute of Technology Press, pp. 397-426.

PLANT, G. 1990. Institutional and Legal Responses to Global Climate Change. *Millennium*, 19(3), pp. 413-428.

The Simpsons. 2006 [TV cartoon series]. G.I. (Annoyed Grunt), Season 18, Episode, Fox, 2006, 12th November 2006. 20.30 hrs. EST.

SCHWÄGERL, C. 2008. Ecuador Seeks to Commercialize Rainforest. *Spiegel online* [online]. 20 November, (Accessed 21st November 2008). Available at: <http://www.spiegel.de/>

SOROOS, M.S. 1994. Global Change, Environmental Security, and the Prisoner's Dilemma. *Journal of Peace Research*, 31(3), pp. 317-332.

UNITED NATIONS DEVELOPMENT PROGRAMME THAILAND. 2007. UNDP Report Ranks Leading Carbon Polluters and Offers Carbon Budgeting Agenda to Forestall Dangerous Climate Change: Time is Now for Thailand to Start a "Low-Carbon" Diet. *UNDP Thailand* [online], 29. November [Accessed 3rd October 2007]. Available at: http://www.undp.or.th/news_20072911.html

WAPNER, P. 1995. The State and Environmental Challenges: A Critical Exploration of Alternatives to the State-System. *Environmental Politics*, 4(1), pp. 44-69.

WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT. 1987. *Report of the World Commission on Environment and Development: Our Common Future*, Chapter 1: A Threatened Future (online). Available at: <http://www.un-documents.net/> (Accessed 16 December 2008).