



Climate Change and Security: Policies, Research and Scenarios

Achim Maas, Adelphi Research (Berlin)

Security Implications of Climate Change in the OSCE
Region

Bucharest,



Climate Change: Entering the Security Agenda

*„[...] the danger posed by war to all of humanity –
and to our planet – is at least matched by the
climate crisis and global warming.“*

Ban Ki-Moon, 2007




*„If we think of the extreme consequences of global
warming – water shortage, desertification, a rise in sea
levels – then it becomes clear that climate protection is
also a matter of national and international security.“*

Frank-Walter Steinmeier, 2007

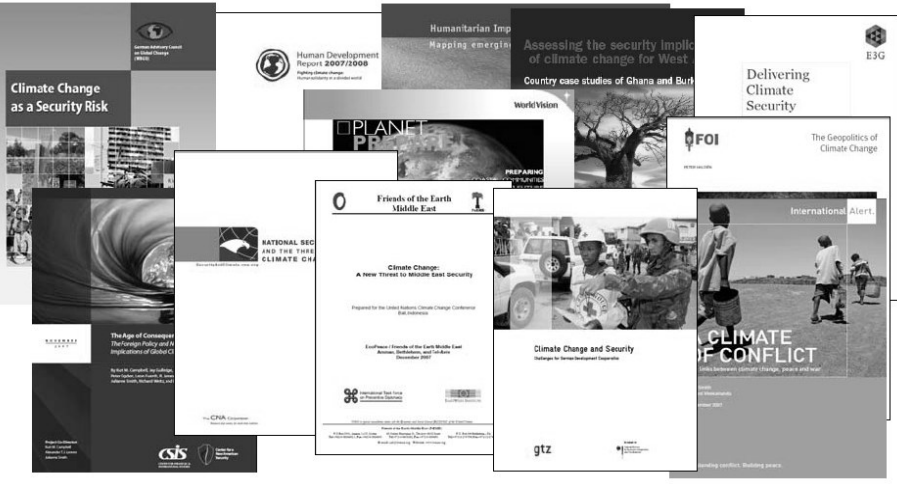


„In short, a failing climate means more failed states.“

Margaret Beckett, 2006



The Security Implications of Climate Change: Many Impact Assessments, Similar Conclusions



Environment & Conflict: Known interlinkages

That **environment is a factor** in contributing to outbreak, duration and termination of violent conflict is not new.

Climate change will intensify and multiply environmental drivers of conflict, but will also add new qualities to environmental conflict.

World Map of Environmental Conflicts 1980-2005



Conflict intensity

- Diplomatic crisis
- Protests (partly violent)
- Use of violence (national scope)
- Systematic/collective violence

Conflict cause

- Water
- Land/soil
- Fish
- Biodiversity


Source: Carius et al. 2006

Climate change: A multiplier of existing threats...

Resources: Competition over resources (land, water, energy, food, labour, income, ...) will increase.

Borders: Sea-level rise will exacerbate unresolved maritime issues – and may question the territorial integrity of states.

Fragility: Changing distribution of resources and inadequate management of climate impacts may erode the social contract – and may (further) destabilise states.



Source: Reuters/December 2005



... and a trigger of new types of conflict.

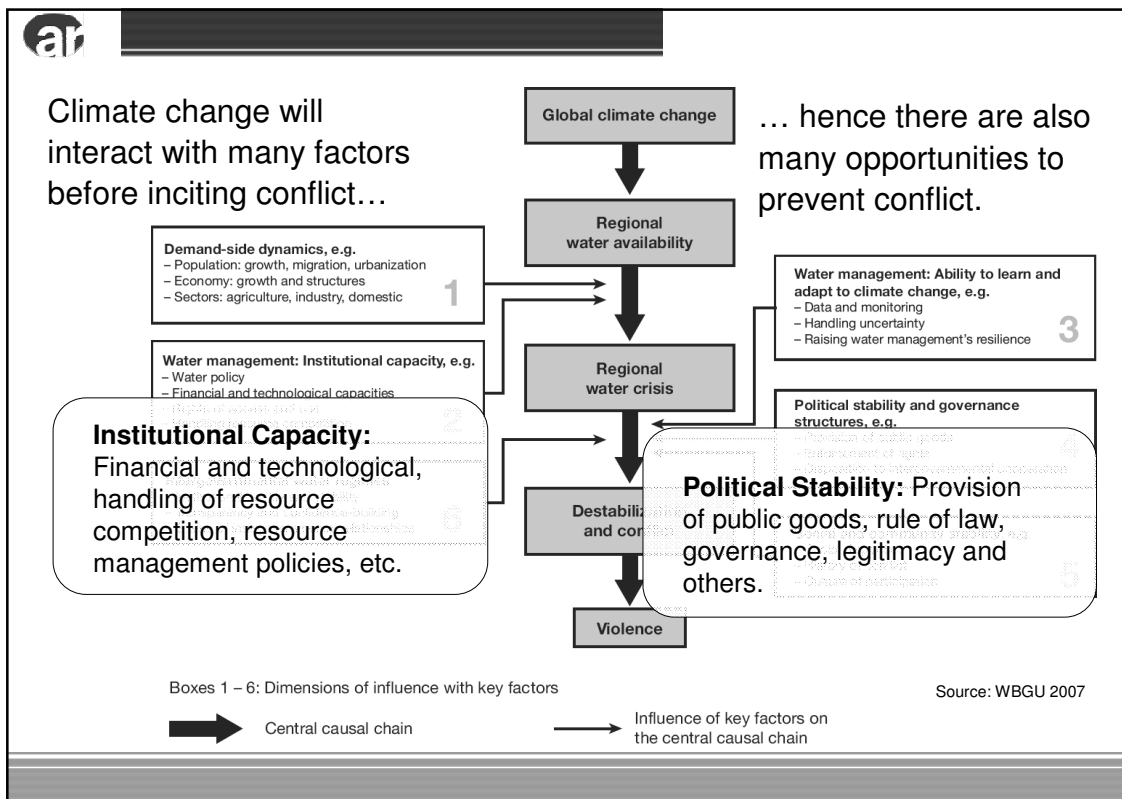
Small Island States: Long before they sink, they will become uninhabitable. Evacuation of Cartaret Islands (Papua New Guinea) commenced in 2005.



Himalaya: Glacier melting will affect hundreds of millions. Uncoordinated adaptation could result in conflict between up- and downstream countries.

President Musevini (Uganda) in 2007: Climate change is an act of aggression of the developed countries against the African people.





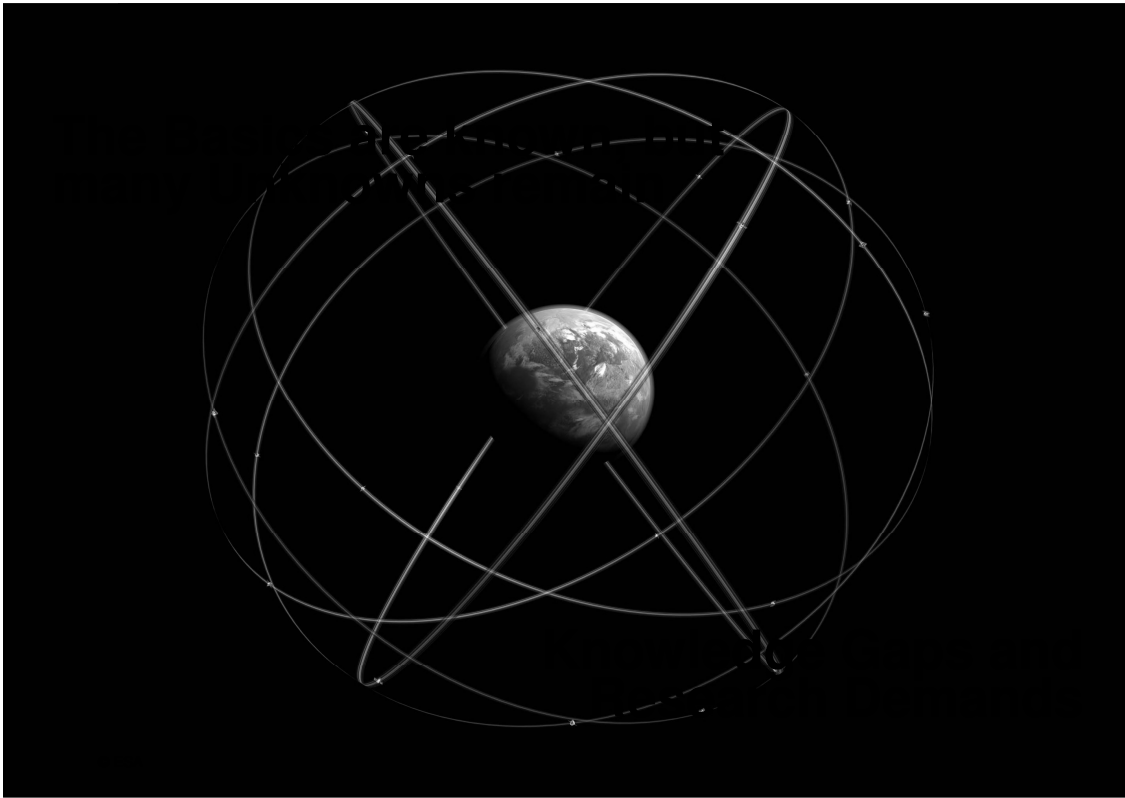
Climate change as Peace Catalyst


Energy Security: Energy efficiency and use of renewables decrease competition for fossil fuels – improving energy security and mitigating tension.

Confidence building: Addressing climate change could foster dialogue and cooperation – globally, regionally, and internally.

Joint Water Cooperation: Regional impacts of climate change on water resources can in many cases only jointly be resolved.

Additional benefits: Reduced proliferation risks, diversification of energy resources, decentralisation decreasing vulnerability.



 **Global Knowns, Local Unknowns**

The global trends of climate change are well known, yet the concrete impacts of climate change are not yet clear.

Regional impacts: Most studies remain global; improving capacities for predicting more concretely regional and (sub-)national impacts of climate change is vital.

Migration: Number ranges are huge, with few serious estimates. How will climate change drive migration and where will it be a sui generis cause of it?

Tipping points: Climate change may initiate irreversible processes whose impacts are not yet fully understood, but could radically impact socio-economic systems.

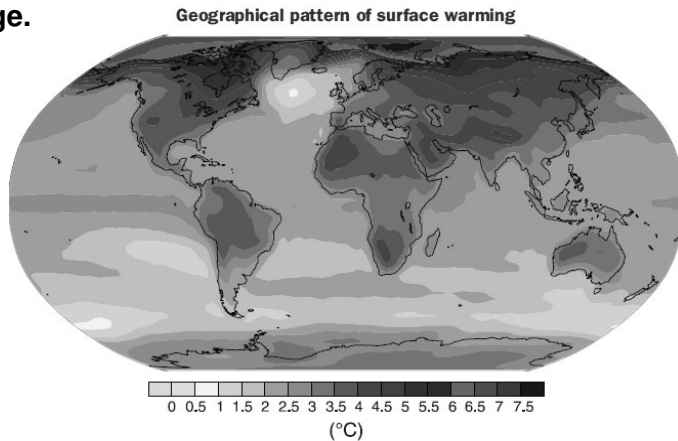
The border between Haiti and the Dominican Republic



Global Trends of Climate Change

IPCC: 2°C - 4°C global average temperature increase by 2100 relative to 1990 possible and sea-level rise of 18-59cm – **excluding tipping points or abrupt climate change.**

Further: Regional effects could be more than **50% higher than the global average** – making the global a bad advisor for the local.



Source: IPCC 2007, Summary for policy makers, p. 9



Research Complex: Climate Change & Migration


The question of climate-induced migration remains among the most complex research challenges and knowledge gaps. Four main research issues exist:

1) Numbers: There are no reliable numbers, only educated guesses ranging from 50-200 million in 2010-2050. How to deal with this lack of data?

2) Directions: Most migration is domestic and rural-urban and depend on many factors. Will these trends change due to climate change?

3) Conflict risks: Environmentally-induced migration may lead to conflict in regions with demographic pressure, rapid urban growth and scarce land and water resources – what are triggers and thresholds?

4) Status: 'Refugee' is reserved for those persecuted. What could be an adequate definition of those displaced by climate change? And what obligations would derive from this?



Security Implications Plausible – But certain?

Security consequences from climate change are plausible, but questions remaining are: When, where and what to expect and hopefully predict?

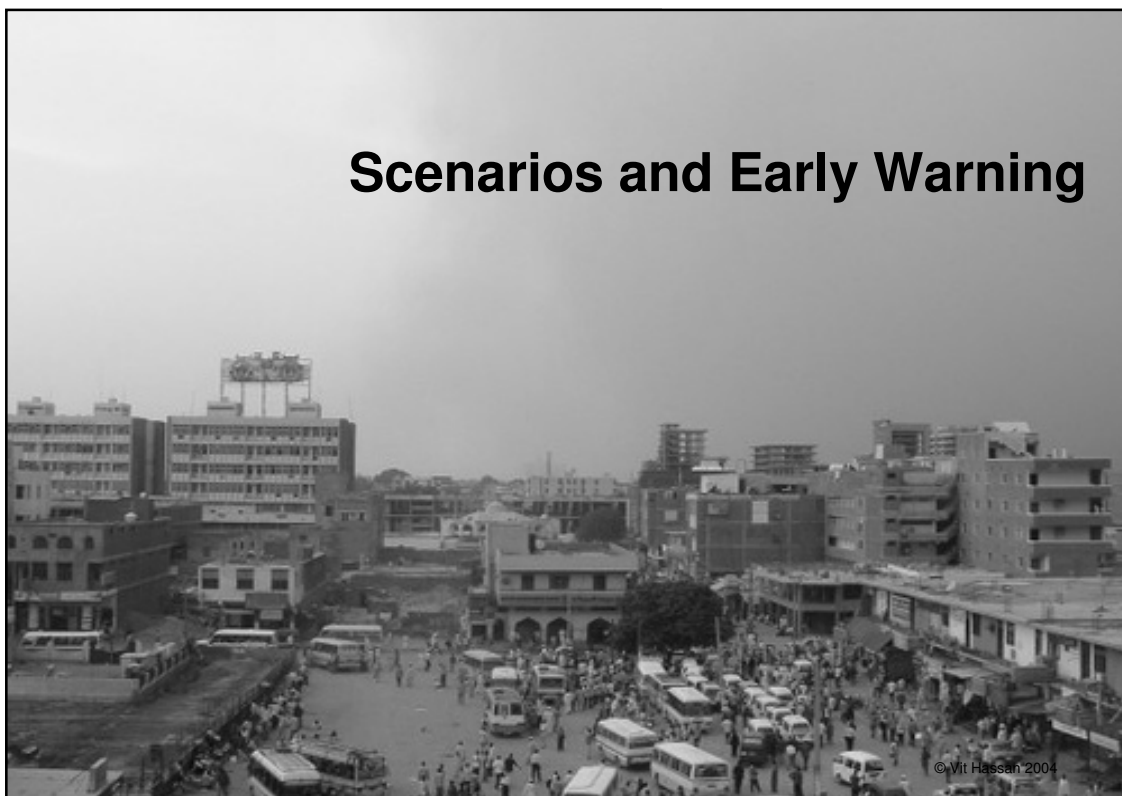
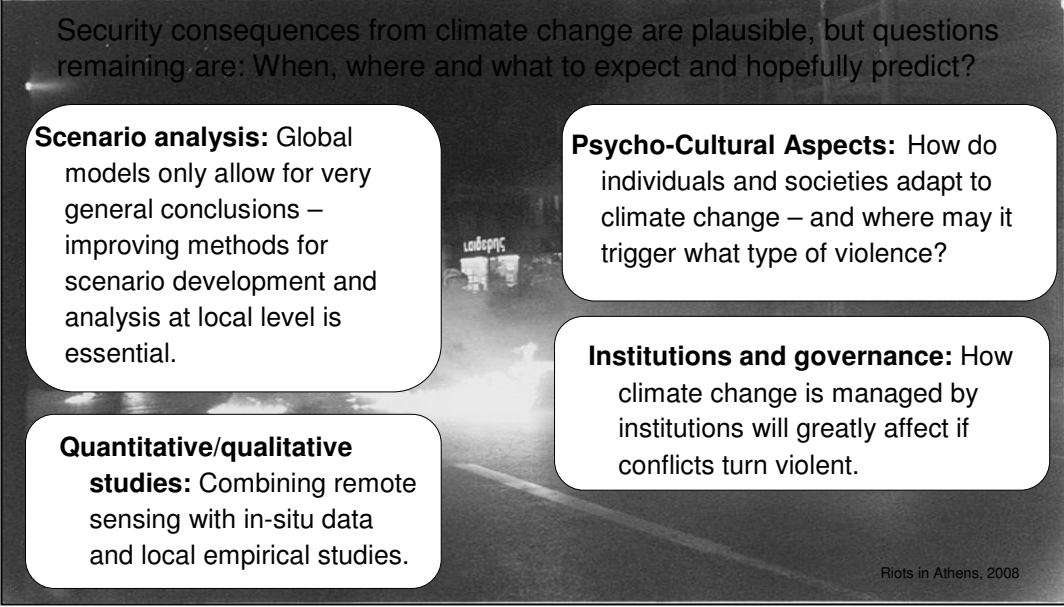
Scenario analysis: Global models only allow for very general conclusions – improving methods for scenario development and analysis at local level is essential.

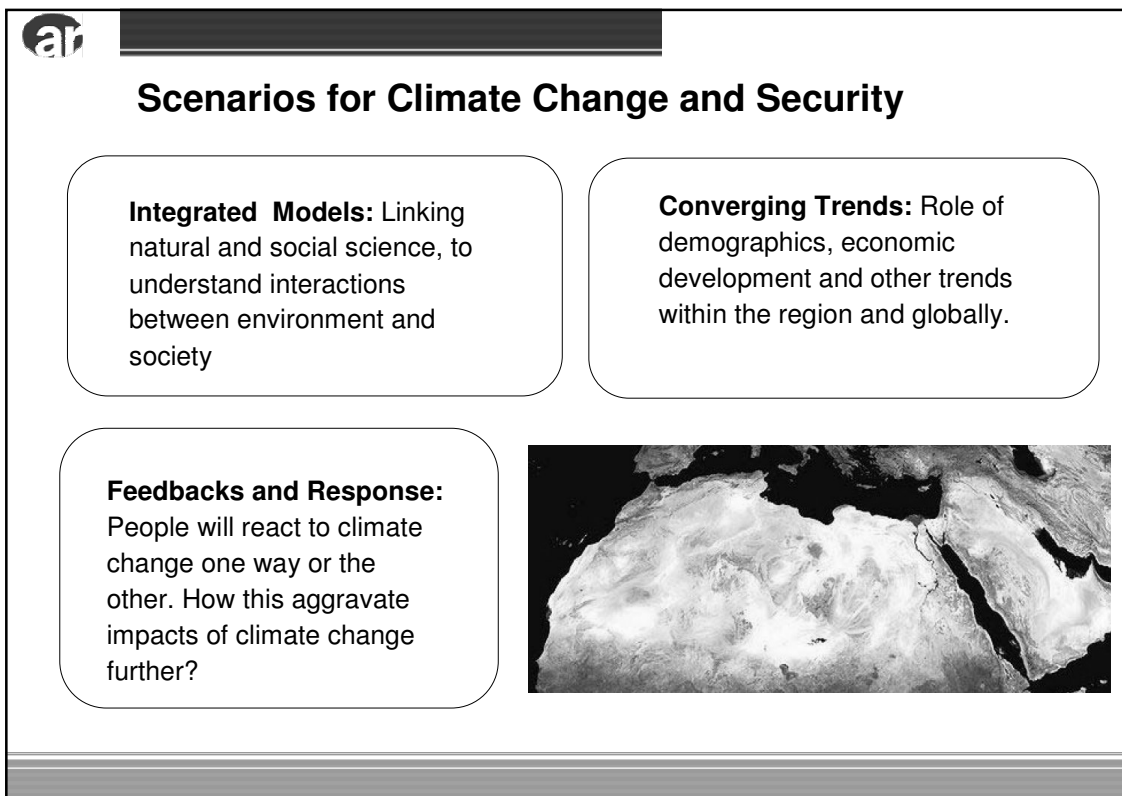
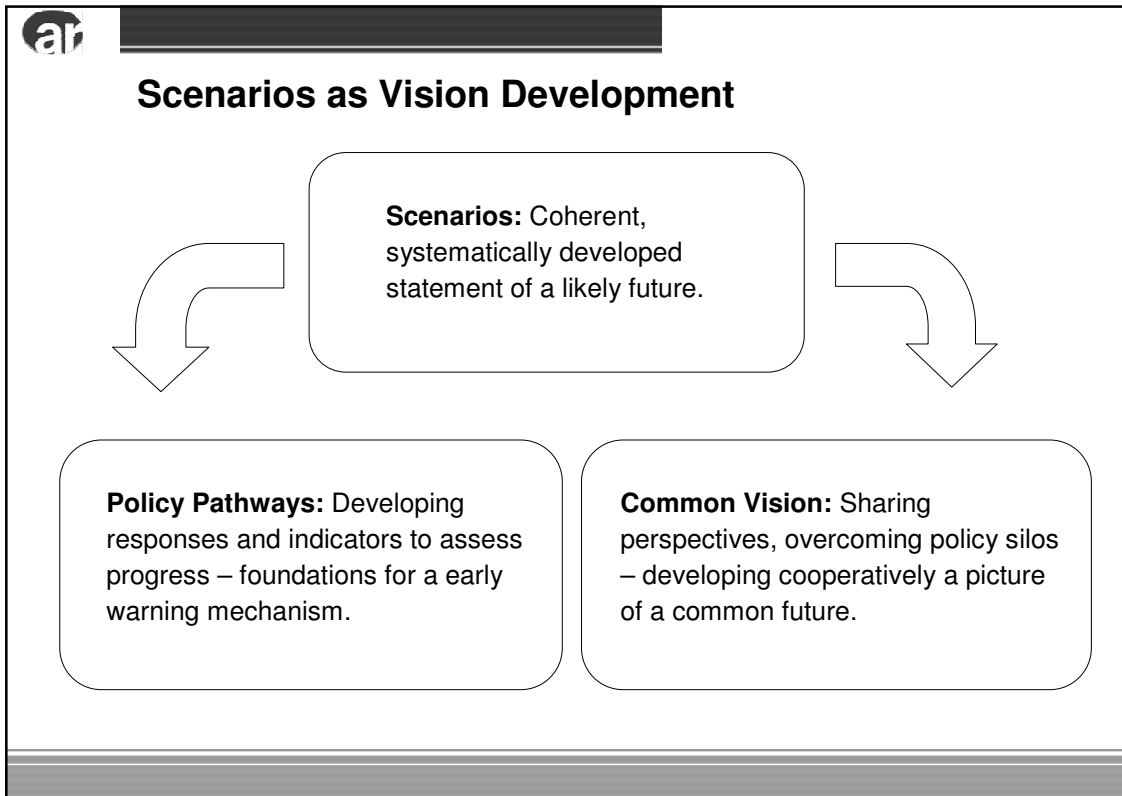
Quantitative/qualitative studies: Combining remote sensing with in-situ data and local empirical studies.

Psycho-Cultural Aspects: How do individuals and societies adapt to climate change – and where may it trigger what type of violence?

Institutions and governance: How climate change is managed by institutions will greatly affect if conflicts turn violent.

Riots in Athens, 2008







Setting up Scenarios: A few Key Issues

Participation: Involving stakeholders from the beginning is vital for ownership and comprehensiveness.

Time frame: Not to overambitious to be relevant – 20, 30 years as maximum to allow developing concrete policies.



Reference point: Clarity about the focus of a scenario – what is the key issue of the scenario and who shall it inform?



Summary

There is no certainty but we have to be prepared to address the increasing number and scale of security risks emanating from climate change.

It is likely to act as threat multiplier, exacerbating existing tensions and creating factors of instability. With adequate policies, climate change could also serve as peace catalyst.

Scenarios can serve as tool for formulating joint policies and lay the foundation for early warning mechanisms.



Thank you for your attention!

You can find further information on

www.adelphi-research.de/ecc and

