

## **OSCE Conference Security Implications of Climate Change in the OSCE Region**

### **“The ENVSEC Response to Potential Security Implications of Climate Change in the Pan-European Region”**

**Marco Keiner, UNECE  
ENVSEC Chair 2009**

#### **Introduction**

The regions in which OSCE and UNECE are working are almost identical. Both organizations are interested in the security implications of climate change. Both work together in ENVSEC, a broad initiative on environment and security issues. Other partners in ENVSEC are UNEP, UNDP, REC, and NATO, the latter as an associated partner.

Numerous scientific studies document changes in key climate indicators that are moving beyond their natural variability patterns, including global mean surface temperature, global ocean temperature, Arctic sea ice extent, sea-level rise, precipitation, ocean acidification and extreme climate events. Since the publication of the Fourth Assessment Report (AR4) of the Intergovernmental Panel on Climate Change (IPCC), new research updating the AR4 has revealed further, discomfiting observations of global climate change.

#### **What are the impacts from climate change?**

In the UNECE/OSCE region, Central Asia will likely suffer from higher than global average temperature increase, resulting in water shortages and decreased food production. An increase in periods of drought will contribute to glacier melting in the long-term. A slight fall in annual precipitation quantity is also expected, with higher precipitation in winter and less in the dry summer period. That means higher probabilities of flooding events in winter and longer and more intense periods of drought in summer. Such will create further imbalances in the annual distribution of precipitation and also lead to a rise in water consumption for irrigation, energy production, and cooling. The decrease in available water will accelerate soil erosion, lowering agricultural productivity and increasing the amount and severity of sand storms. Due to soil pollution, the latter can adversely impact public health, in addition to causing infrastructure damage. Decreasing water availability will also negatively affect the capacities for hydropower production in the long-term.

On the South Caucasus, the IPCC remains largely silent: There is little concrete data available except for global studies addressing either (eastern) Europe or (western) Asia. However, it can be inferred that glacial melting will, in the long run, also decrease water availability in the region and increase water stress. Furthermore, desertification and soil degradation will increase, reducing agricultural productivity in the region. Finally, sea-level rise and surge-driven flooding will become substantial challenges for both Azerbaijan and Georgia.

## **Regional security impacts of climate change: Central Asia and the South Caucasus**

Because of its serious impact, climate change is seen as a challenge for development and human security, which could halt or even reverse developmental achievements and threaten livelihoods. In particular, climate change can have serious adverse effects on human health, food security, economic livelihoods, and human security, which means mounting the conflict potential and increasing social tensions driven by climatic changes. A recent study from Adelphi Consult assesses the impacts of climate change on conflict and security from a development policy perspective and formulates proposals for ways to further address this issue.

Central Asia is already an area prone to conflict and climate change impacts could further strain relations, particularly over water. In the South Caucasus it could negatively impact the resolution of existing conflicts. Both regions are of geo-strategic relevance for Russia, Europe, the USA (both) and China (Central Asia), thus escalations in either region could draw the involvement of major global powers. Global conflicts could, in turn, adversely affect the region as well, diminishing capacities for adapting to climate change.

### **Threats and threat minimizers**

At the last General Assembly of the UN, the Secretary-General presented a report on Climate change and its possible security implications. The report approaches the question from a perspective of interdependence between human vulnerability and national security and identifies five channels through which climate change could affect security:

- (a) *Vulnerability*: Climate change threatens food security and human health, and increases human exposure to extreme events.
- (b) *Development*: If climate change results in slowing down or reversing the development process, this will exacerbate vulnerability and could undermine the capacity of states to maintain stability.
- (c) *Coping and security*: Migration, competition over natural resources and other coping responses of households and communities faced with climate-related threats could increase the risk of domestic conflict as well as have international repercussions.
- (d) *Statelessness*: There are implications for rights, security, and sovereignty of the loss of statehood because of the disappearance of territory. In the OSCE region, this might be the least probable impact. However, rural-urban and even transboundary migration and an increased number of internally displaced persons could be a new challenge.
- (e) *International conflict*: There may be implications for international cooperation from climate change's impact on shared or undemarcated international resources, in the OSCE region mainly water. Water dams in upstream countries and the use of transboundary groundwater resources could be a source of conflict.

This is not an exhaustive list, as new challenges may warrant the attention of the international community in future.

Climate change is often viewed as a “threat multiplier”, exacerbating threats caused by persistent poverty, weak institutions for resource management and conflict resolution, fault lines and a history of mistrust between communities and nations, and inadequate access to information or resources.

However, there are several “threat minimizers”, namely conditions or actions that are desirable in their own right but also help lower the risk of climate-related insecurity. These include climate

mitigation and adaptation, economic development, democratic governance and strong local and national institutions, international cooperation, preventive diplomacy and mediation, timely availability of information and increased support for research and analysis to improve the understanding of linkages between climate change and security. Accelerated action at all levels is needed to bolster these threat minimizers. Most urgently, a comprehensive, fair and effective deal in Copenhagen will help stabilize our climate, protect development gains, assist vulnerable nations adapt to climate change, and build a more secure, sustainable and equitable society.

### **ENVSEC's work on climate change and security**

As said before, OSCE is also a partner to ENVSEC. ENVSEC organized in June this year a workshop on climate change and security. I want to inform you on the outcomes of the workshop.

For strengthening capacities to respond to crisis and security threats there is a need to resort to mixed strategies (including both adaptation and mitigation measures), to overcome the inefficiency of coping strategies of fragile states, to respond to the increased environmental migration pressure linked with climate change, improving preventive strategies and tools at regional and sub-regional levels, and to bridge knowledge gaps and better guiding investment in climate resilience and risk management.

From a methodological point of view, it is crucial to better define Following the concepts of 'climate security' and 'climate change and security'. Moreover, since the current work of international organizations is challenged by a knowledge gap and lack of communication at the local level, there is a clear need for disaggregated data and tools at the local level.

Many data resources on climate change effects in Central Asia (especially concerning water and soil) are already available but an analysis of links with security issues is missing. A deeper look at governance structures and state capacities, as well as political, institutional, economic contexts – including the neighborhood situation – is needed to evaluate the impact of climate change in the security field. Finally, it appears obvious that there is a need for developing relevant scenarios to understand how climate change impacts security locally and regionally, reactivating regional networks of knowledge, identifying 'entry points' for policy cooperation in adaptation focusing on a security approach (readiness to 'be political'), and fostering innovation for capacity building.

That said, possible areas of work for ENVSEC include:

- awareness-raising (information dissemination, knowledge networks...)
- regional dialogue and cooperation
- strengthening policies and institutions on regional level
- capacity-building
- assessments/analysis on the main climate-induced security risks

ENVSEC will mainly focus on adaptation projects. In all regions, Central Asia, Southern Caucasus, Eastern Europe and South Eastern Europe, ENVSEC's work will include:

1) Facilitation of exchange of information and awareness-raising

E.g.: compilation of information related to climate change security, organization of workshops, identification of best practices and dissemination of information

2) Support of regional cooperation and dialogue on climate change scenarios and strategies developed by the countries or other international organizations

E.g.: interstate conference/agreements/roadmaps towards common approach to climate change challenges

3) Analysis of priorities and hotspots regarding security impacts of climate change on a regional level (identification of regional 'climate security constellations')  
E.g.: South Caucasus regional study on climate change impacts

4) Support of adaptation measures related to hotspots and vulnerabilities in different sectors  
E.g.: floods and water security, forest fires...

Special regional and local needs and priorities will also be taken into account such as:

In Central Asia:

- looking at the modifications of the hydrological cycle and their impacts on other areas, and
- assessing the impacts of climate change on water efficiency and management

In Southern Caucasus:

- supporting the development of national environmental security strategies focused on climate change (such as emergency preparedness plans, long-term planning mechanisms)
- capacity-building and networking on adaptation to climate change (such as emergency preparedness, management of water variability and forest fires)
- developing strategies for energy security and alternative energy (Cf. energy corridors)

For Eastern Europe:

- floods management and water supply for the most vulnerable populations and ethnic minorities
- food security (even if climate change could have some positive impacts on agriculture they are weakened by fragile governance structures at the country level)
- health problems linked with climate change
- environmentally induced migrations (Belarus is already receiving population)
- adapting to the closure of nuclear and other industrial plants which could degenerate into conflicts

In South Eastern Europe:

- training of border police on environmental issues
- climate-induced biodiversity loss
- landslides and land instability
- floods linked with pollution (industrial and mining areas)

What is important to notice is that the common impact on climate change on security needs joint but also diversified responses.

To sum up: the challenge of climate change and its security impacts in the UNECE/OSCE region is obvious. But luckily, there are answers, strategies, and also forms of cooperation among international organizations, such as ENVSEC to tackle the problems and to deal with them before they get out of control. In that sense, I encourage OSCE to continue its work and to collaborate with the other partners in the ENVSEC Initiative to support human societies at all levels and across borders to improve security and cooperation in the pan-European region.