

Climate security – a new generation of environmental conflict looms

Climatic changes threaten to lead to violent conflicts over water and fertile land. Tensions over dwindling natural resources have already arisen in the past. The debate on adaptation is acquiring increasing significance in the context of efforts to avoid a new generation of environmental conflicts. The EU is among those to have recognised this, resolving at its Spring 2008 Council meeting to tackle the security policy consequences of climate change.

Climate change is turning into a security threat. Taking their lead from the findings of the Intergovernmental Panel on Climate Change (IPCC), a number of expert reports have highlighted the security policy implications of climatic changes. The United Nations (UN) Security Council discussed the impacts of climate change on peace and stability for the first time in 2007. Based on a report produced in-house, the EU acknowledges in the Conclusions of the European Council in March 2008 that there is considerable need for action. There is every reason to believe that the issue of adaptation to climate change will become a key priority for international politics.

Environmental security in a new light

Will the climatic changes predicted by IPCC lead to violent conflicts over water and fertile land? This question represents a continuation of the debate

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on environmental security that has taken place since the 1980s. In this context, environmental degradation and the growing scarcity of natural resources pose a non-traditional security problem that should be taken seriously. At the same time, it has been shown that environmental burdens are not the sole cause of conflict but rather have intensified acute or latent conflicts. The outbreak of violence, in this view, depends on other factors, such as broader socio-economic conditions, population pressure and the region's specific history of conflict.

Mechanisms of societal adaptation aimed at avoiding crises and violent

conflicts exist in many places. One example is transboundary water use – agreements between countries and institutions ensure that cooperation exists between the countries concerned and contribute towards building trust. Cooperative agreements involving rivers that cross country borders are intended not only to guarantee a basic supply of drinking water but also regulate irrigation measures, fishing and the use of water to generate hydropower. Setting up cooperative arrangements along with integrated resource use can stabilise cooperation and support peace processes, thereby establishing environmental security.

The emerging transition from environmental security to climate security is significant, however. Climate change can be expected to increase environmental stress to such an extent that serious impacts loom in terms of resource availability, agricultural productivity, the flooding of coastal regions and the magnitude of extreme weather events. There is every reason to believe that climate change is a long-term factor that will further intensify existing local and regional conflicts over renewable resources, such as jointly used water or agricultural land, thus potentially making efforts at cooperation considerably more difficult.

The flooding of coastal regions, a regular occurrence in Bangladesh, causes losses of fertile land bitterly needed for food production.



Photo: J. Boehling



Photo: laif

In Gansu Province, like in many other regions of China, desertification is advancing rapidly.

to reduce greenhouse gas emissions for the period after 2012. At the same time, there is a growing likelihood that the risks of climate change will become a reality – with corresponding impacts upon stability and peace.

Climate change as a security risk

The German Advisory Council on Global Change (WBGU) has doubtless produced the most comprehensive status report to date about the security policy implications of climate change in the form of its 2007 annual report (WBGU, 2007: *Climate Change as a Security Risk*). The report extends the work of IPCC by considering the security policy perspective and in doing so closes a gap that had existed in the focus of the international body of scientific experts: while IPCC addresses the social and economic impacts of climate change, it remains largely silent on the issue of potential (security) policy consequences. What is needed to make up for this lack is a systematic analysis of past environmental conflicts. The authors of the WBGU report made a contribution towards this by analysing more than 70 environmental conflicts that occurred between 1980 and 2005 in terms of their spatial scope, their intensity and the situation regarding natural resources that substantially gave rise to them (Carius, A., Tänzler, D., Winterstein, J., 2007: *Weltkarte von Umweltkonflikten: Ansätze zur Typologisierung*). One feature common to all the conflicts examined was that the predicted impacts of climate change could just as well have been one of the triggering factors.

Lessons from the past

The analysis of environmental conflicts and their predominant ecological causes shows clearly that the increasing scarcity of fertile land accompanied

simultaneously by dynamic population development and growing environmental stress has already led to a pronounced intensification of conflict in the past. These conflicts have so far remained largely regional in terms of the scope of their impacts. In addition, the analysis enabled some initial insights to be gained regarding regional patterns of conflict. In Central America, for example, conflicts over land use and soil degradation predominate, while in Latin America the loss of biodiversity additionally plays a significant role. Conflicts that occur in the Sahel zone are, in many cases, a combination of conflicts over water and soil degradation, and in the Near East conflicts over water are heavily politicised.

In some cases in the past, growing environmental stress has already intensified local conflicts to the extent that they have spread to other countries. For example, soil degradation and water scarcity in Mali and its neighbouring states led to migration flows involving Tuareg nomads that had far-reaching deleterious consequences, including expulsions, militarisation, etc. Such conflicts over the use of soil resources between settled farmers and nomads are being observed increasingly in Africa, and tensions are additionally reinforced by an inequitable distribution of land. Environmental degradation linked with population growth leads to a scarcity of potential migratory destinations.

Darfur revisited

Conflicts that occur in regions already characterised by adverse climatic conditions are often identified even nowadays as a consequence of emerging climate change. This has been discussed most prominently over the last few months in connection with the Darfur conflict. UN Secretary-General Ban-Ki Moon, for example, identified climate change as a key cause of the devastating conflict in the Sudan. Although this point of view is controversial, a post-conflict assessment conducted by the UN Environmental

Climate policy disputes in flux

Since greenhouse gas emissions have a global impact, they cannot be attributed regionally. Accordingly, a global approach is needed to monitor and control them. The international climate negotiations, intended as just such an approach, however, are already proving to be extremely cumbersome, not least with regard to the process of balancing interests between the drivers of climate change and those affected by it. The climate policy conflict scene has become more complex and can no longer be described straightforwardly in terms of a dichotomy between industrialised and developing countries. While the predicted impacts of climate change will affect developing countries to a greater extent – particularly poorer sections of the population – the skyrocketing energy requirements of populous countries such as India and China simultaneously mean that these countries are fast becoming the main generators of greenhouse gases, even if per capita emissions still lie far behind those of the industrialised countries. The number of influential states sitting at the negotiating table for international climate policy is growing. This makes it even more difficult to reach agreement on wide ranging measures

Zusammenfassung

Klimaveränderungen drohen zu gewaltförmigen Konflikten um Wasser und fruchtbares Land zu führen. Bereits in der Vergangenheit sind Spannungen um sich verknappende natürliche Ressourcen aufgetreten. Eine Auswertung bisheriger Umweltkonflikte zeigt, dass diese vornehmlich lokal begrenzt aufgetreten sind und nicht zuletzt durch Kooperation eingedämmt werden konnten. Die Prognosen der Klimaforschung legen nahe, dass gerade in instabilen Regionen wie in großen Teilen Afrikas neue Herausforderungen entstehen. Um eine neue Generation von Umweltkonflikten zu vermeiden, gewinnt die Anpassungsdiskussion zunehmend

an Bedeutung, die bislang in den internationalen Klimaverhandlungen vernachlässigt worden ist. Dies hat auch die EU erkannt und den sicherheitspolitischen Folgen des Klimawandels auf ihrem Frühjahrsrat 2008 den Kampf angesagt.

Resumen

Los cambios climáticos amenazan con generar conflictos violentos en torno al agua y las tierras fértiles. Ya en el pasado se han producido tensiones alrededor de recursos naturales decrecientes. La evaluación de los conflictos ambientales en el pasado muestra que éstos suelen aparecer en áreas geográficas limitadas, y que pueden ser contenidos

gracias, por ejemplo, a la cooperación. Los pronósticos de la investigación climática indican que precisamente en las regiones inestables – como es el caso de una buena parte del continente africano – aparecerán nuevos desafíos. Con miras a impedir el surgimiento de una nueva generación de conflictos ambientales, los debates en torno a la adaptación vienen adquiriendo creciente importancia, si bien hasta ahora han sido dejados de lado en las negociaciones internacionales sobre el clima. Esto ha sido reconocido también por la UE, la cual ha anunciado en su sesión de marzo de 2008 que combatirá las consecuencias del cambio climático para la política de seguridad.

Programme (UNEP) at least provides comprehensive evidence of how seriously environmental conditions in the Sudan have deteriorated over the last few decades (UNEP, 2007: *Sudan. Post-Conflict Environmental Assessment*). Ever since a devastating drought in the Horn of Africa in the 1980s, amounts of precipitation in the Sudan have fallen by 40 per cent. As a result of the increasing pressure of use, the rate of deforestation has reached dramatic proportions. These trends – and this conclusion is more crucial than the question of the extent to which climate change has already contributed to violent conflicts in the present – are set to continue into the future. Issues of land distribution and additional pressure of use through refugee flows now threaten to intensify these problems to such an extent that it would come as no surprise if the entire region were to succumb to political destabilisation.

Uncertain prospects

The security policy implications are not limited to Africa. Rapid glacier melt in places such as the Himalayas is also foreseeable. The “water tower” of Asia is in danger of collapsing in upon itself within a few decades from now – with disastrous consequences for half a billion people whose supply of drinking

water is fed by the glacier. Relations between India and Pakistan as well as between India and Bangladesh are already highly delicate – not least on account of the issue of water supply. Climate change is thus becoming a key factor in regional and global stability.

How can the international community respond to these challenges? In order to prevent the outbreak of conflict, it is necessary to develop long-term and wide ranging solutions that link the specific demands of environmental and development policy with those of foreign and security policy. Climate policy is no longer the exclusive concern of environmental departments; nor will international climate negotiations any longer be adequate as a forum. Political solutions need to be sought both at domestic state level as well as at bilateral and multilateral level. Activities involving cooperation need to be supported, as do initiatives for sustainable resource management, in order to avoid further

environmental degradation. Societies need to adapt their ways of life to the changing environmental conditions – not least in order to strengthen traditional and innovative mechanisms of conflict resolution. This has been recognised by the EU as well. At the EU’s March 2008 Spring Council meeting, High Representative Javier Solana and the European Commission presented a joint report. This identifies not only the possible security policy impacts of climate change but also proposes, among other things, that issues to do with adaptation to climate change should be the object of various regional strategies in the EU. The Council’s Conclusions represent a response to the report: by December 2008 further steps are to be set out in greater detail.

UN-Secretary General Ban Ki-Moon identified climate change as a key cause of the devastating conflict in the Sudan.



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