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ENVIRONMENT-RELATED CONFLICTS: BALANCING ECOLOGY AND POLITICS

The notion of environmental and resource conflicts has received much attention in political debates lately. From a security policy perspective, however, this is a very heterogeneous category. Various types of such conflicts must be differentiated if responses are to be appropriate. Effective peacebuilding also requires a careful balance between ecology and politics. Otherwise, there is a danger of depoliticizing and ignoring local actors, or of over-politicizing global responses to such conflicts.

Sudanese girl refugee from the war-torn Darfur region, 18 August 2007 *Reuters / Yannis Behrakis*

The notion of environmental and resource conflicts has increasingly attracted the attention of the public and policymakers recently. The impact of climate change in Darfur, the suggested link between oil and war in the Middle East, and the role of "blood bananas" from Somalia are all examples pointing to an environmental dimension of security. Yet, developments lumped under the collective label "environmental conflicts" comprise a diverse range of conflicts. Further differentiation of these conflicts is essential to understand them better and come up with the right kind of prevention and peacebuilding measures.

The most policy-relevant way of categorizing environment and resource-related conflicts is according to conflicts related to what has been coined the "resource curse," to "local resource scarcity", or to conflict "hot spots" that combine both types of resource conflicts in addition to being highly escalated for other reasons. While all resource conflicts are related to scarce resources, as there would otherwise be no incentive to fight over them, there is a difference between resources that are globally scarce and locally abundant (i.e., "resource curse" conflicts) and resources that are globally abundant or sufficient, but locally scarce (i.e., local resource scarcity conflicts).

"Resource curse" conflicts

Conflicts related to the "resource curse" are linked to the global commercial use of resources that are consumed "indirectly", far from their point of extraction. Lucrative resources such as oil or diamonds are scarce at the global level, yet they are found in concentrated areas at the local and regional levels. Rather than giving rise to economic development in these countries, the resources are often more a curse than a blessing for the respective populations. Natural resources frequently bring with them either a rapid (e.g. diamonds) or large-scale (e.g. oil) and unregulated influx of money, and so they can cause, prolong, or intensify violent conflict or even war. The probability of violent conflict in countries that export oil, gas, and diamonds has increased since the early 1970s. One key nexus between conflict and resources is the lack of good governance in producing countries. This can mean various things in particular contexts: resource wealth may be used to fund armed non-state actors; dictatorial states are not accountable to their tax-payers ("rentier state"); resources are incentives for coup d'états; the "Dutch Disease" means that resource income leads to a lack of diversification in the economy; and regionalized resource wealth may create incentives for insurgencies, separatism, or oppression in the resource-rich part of the country. Examples of primary commodities related to civil wars are oil (Northern vs. Southern Sudan, Nigeria), diamonds (D.R. Congo), timber (Cambodia, Burma), copper (Papua New Guinea), and coltan (D.R. Congo).

The impact of "resource curse" conflicts can be far-reaching. Frequently it is of global scale. One major concern relates to the resource security of the developed and emerging economies. Conflicts that are related to resources, or that occur in

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resource-rich regions, can have a negative impact on the supply and price of resources that are of strategic relevance to the industrialized world. This problem is likely to increase further as the remaining oil and gas reserves are increasingly concentrated in instable areas, such as the Middle East and Russia. By contrast, the much-debated danger of great power "resource wars" appears smaller than is sometimes maintained. There is evidence that peak oil (i.e., the time at which the maximum oil production rate is reached) may be less imminent than some have claimed. Moreover, the high degree of interdependence between the great powers suggests a cooperative solution to the global energy challenge. This interdependence is also the reason why fears of resource-rich great powers like Russia strategically leveraging their resource wealth for political purposes may be exaggerated.

Global *indirect* reverberations of "resource curse" conflicts, such as forced migration, spread of diseases, organized crime, terrorism, and proliferation of arms, are also to be taken into account. While these indirect threats are often diffuse and difficult to measure, they are nevertheless pivotal to global stability and security. For example, the International Federation of the Red Cross estimates that there are currently tens of millions of "environmental" refugees. Finally, "resource curse" conflicts obviously also have detrimental impacts on the local and regional levels. These impacts include direct battle-deaths, as well as more indirect aspects such as growing poverty, malnutrition, social polarization, and economic decline that in the aggregate hinder local development and exacerbate human insecurity.

Possible policy measures to deal with "resource curse" conflicts include above all the adoption of efforts for structural conflict prevention. Measures could include efforts to regulate markets and to increase the transparency of goods and capital in the extraction of and trade in natural resources, the provision of aid and technical expertise to increase good governance and policies in the resource-rich countries, and efforts to increase sustainable consumption patterns in the countries consuming the resources. The Extractive Industries Transparency Initiative or the Kimberly Process for crude diamonds are examples illustrating new models of cross-sector governance that could be further developed.

The Extractive Industries Transparency Initiative

A cross-sector initiative to improve governance in countries rich in oil, gas, and minerals by enhancing transparency and accountability in the extractives sector.

- **Aim:**
  Make the resources of a country a source of economic growth rather than a catalyst for corruption and conflict.
- **Means:**
  - Revenue transparency
  - Global standard according to which companies publish their payments to governments and governments publish the revenues received by companies
  - Independent administrator
- **Participants**
  Focus is on producing countries, they can apply to participate.
  Other actors involved:
  - Private sector: extractive industries, industry associations, institutional investors
  - Civil society
  - International organizations and donor countries

Local "resource scarcity" conflicts

These conflicts are generally less related to the global commercialization of the resource and tied more closely to the "direct" local or regional access, production, and consumption. Rather than having a direct impact on the resource security of the developed and emerging countries, they are predominantly a security concern in terms of local and regional stability and have indirect global reverberations. One example of a typical local "resource scarcity" conflict concerns the clashes between large mechanized farms encroaching on the land of pastoralists and traditional farmers, as can be observed in many countries of sub-Saharan Africa. Generally, the state will support the large-scale farmers by granting legally binding property rights and state enforcement, ignoring the already existing, often uncodified traditional property rights to both land and water. The kind of violence that ensues is usually limited, e.g., cattle are driven into the fields of the new farm, or a few people are killed. In combination with other issues and group cleavages (e.g. ethnic), however, this can lead to social unrest that may escalate.

In addition to conflicts in the agricultural sector, similar conflicts may also occur in the domestic and industrial sector. Conflicts over drinking water may occur when public drinking-water facilities are privatized without sufficient participation of the involved stakeholders. Combined with other factors, this may lead to riots, as in the case of Cochabamba, Bolivia. Conflicts in the industry sector are often found in the context of large-scale projects. Examples include large dams, river diversions, drainage of swamps, and the construction of nuclear power plants or industrial complexes. The World Commission on Dams estimates that 40 to 80 million people have been relocated due to the construction of large dams during the past 50 years. Beyond the 1.4 million people already displaced by the Three Gorges Dam in China, the dam is likely to cause several million more environmental refugees as the areas adjacent to the reservoir deteriorate.

On the international level, water scarcity, combined with shared water resources such as an international river, may lead to tensions between upstream and downstream users. Approximately 45 per cent of the global land surface is covered by river basins crossing international boundaries. There are about 260 international rivers; important rivers related to water conflict and cooperation include the Nile, the Jordan, the Euphrates and Tigris, the Indus, and the Mekong. There is some evidence that countries that share rivers have a higher risk of military disputes, although the correlation between water scarcity and armed interstate conflict is not very strong. There are also plausible arguments against the "water war" myth – even if water scarcity can lead to sub-national political instability. A key factor why international river conflicts usually do not lead to war is because a water-scarce country can import food. "Virtual water" is water embedded in food, which can be more easily transported than water.

Conflicts over access to locally scarce resources are mainly due to the marginalization of part of the population. In economic

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terms, such conflicts can partly be linked to the failure to internalize the external costs of the respective activity. Other conflicts, however, are a symptom of structural change that can be economically efficient, but nevertheless potentially detrimental to a part of the people affected. Also, climate change is a key trend potentially affecting such conflicts. According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change of 2007, the resilience of many ecosystems is expected to be overtaxed during this century. Should average temperatures increase more than 1.5 to 2.5 degrees Celsius, major changes in ecosystem structure are projected, with mainly negative effects on biodiversity and ecosystem elements such as water and food supply.

Besides global measures to mitigate climate change, many of the measures to deal with such conflicts must be adapted more strongly to local conditions than the global measures designed in response to the "resource curse" type of conflicts discussed above. Clarity about water and land property rights (often a combination of state, private, and communal rights), for example, is crucial in order to protect and develop traditional livelihood systems and create incentives for investment and development. The people directly affected by development projects need to be involved in the decision-making processes, and access to resources essential for livelihoods need to be guaranteed, or real alternatives must be offered (e.g., in case of relocation due to large dam projects). External costs need to be internalized, and measures to mitigate the negative effects of structural change have to be undertaken.

Conflict "hot spots" – the example of Darfur

In many highly escalated conflicts and "hot spot" regions, the environment plays an important, though not always primary, role. The conflict dynamics often supersede structural conflict factors, so that the distinction between the various conflict causes is hard to assess. Darfur is a good example of a conflict where scarcity of land and water resources, oil, politics, economics, and socio-cultural factors all intermingle. Since the dramatic escalation of this conflict in 2003, some 200,000 to 400,000 people have lost their lives, and more than one million people have become dependent on humanitarian assistance. There is lack of agreement on what provoked this tragedy. Many experts have identified the twin issues of power- and wealth-sharing between the center and the historically marginalized periphery as key causes of the Darfur conflict. Some blame China's oil-first approach and its lack of pressure on the Sudanese government for the scale of the crisis. But there are also those who give priority to environmental explanations over political ones.

UN Secretary-General Ban Ki Moon said that "amid the diverse social and political causes, the Darfur conflict began as an ecological crisis, arising at least in part from climate change." There is evidence that rainfall is decreasing in the Sahel belt, and that this has aggravated already existing and age-old conflicts between different land use systems, to the point where traditional conflict management mechanisms were overtaxed. The 1970 Unregistered Lands Act entitled the Sudanese government to use force in acquiring land, alienating agro-pastoralists and riding roughshod over traditional property rights. This made room for large-scale mechanized farms that encroached on traditional systems of land use. The 1990 Investment Act gave further rights to the state. Thus, the key environmental factors that contributed to conflict and instability in Sudan have been environmental changes, the state's mismanagement of this fragile ecosystem, and the suppression and incapacity of the traditional land and conflict management systems to deal with the new situation. These aspects should not, however, be viewed in isolation from other political factors.

As for possible measures to deal with such conflicts, operational conflict-prevention elements such as mediation to support peace negotiations and military peace support operations to assist the implementation of peace agreements are essential and should complement more structural conflict-prevention aspects as mentioned above. Furthermore, wealth-sharing clauses need to be integrated in peace agreements, and institutional frameworks must be developed to deal with the longer-term questions of economic diversification and equitable access to resources essential for sustainable livelihoods.

Balancing ecology and politics

Conflicts such as in Darfur show how the right balance of politics and ecology is difficult, but essential for responding adequately to so-called "environmental conflicts". For the danger of labeling conflicts as "environmental" or "economic" is that they lead to a depoliticization of local and national actors. Quick fixes based on technical and top-down standardized approaches may be tempting for the international community, but if these attempted solutions ignore the interests, needs, and value frameworks of local actors, they will not be acceptable and will therefore not be sustainable. On the other hand, on the global level there is a danger of over-politicizing and thereby blocking measures that would be important to prevent environmental conflicts. Examples include the limited international support for initiatives to enhance transparency in the extraction of natural resources, or the still limited measures for seriously mitigating climate change.

E-Dossier: CSS Environment and Conflict Transformation

- Linking Environment and Conflict Prevention – The Role of the United Nations (forthcoming)
- Ethiopia and the Nile
- International River Basins: Management and Conflict Perspectives
- Transforming Environmental and Natural Resource Use Conflicts
- Confronting the Concept of Environmentally Induced Conflict
- From Conflict to Cooperation in the Nile Basin
- Analyzing Economic Market Interactions as Conflicts: New Concepts to Assess Market-Based Policy Instruments

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- Author: Simon Mason
  mason@sipo.gess.ethz.ch
- Responsible editor: Daniel Möckli
  analysen@sipo.gess.ethz.ch
- Translated from German:
  Christopher Findlay
- Other CSS Analyses / Mailinglist:
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