

Climate Change and Security in Africa

Challenges and international policy context

Alexander Carius

**Paper commissioned by the
United Nations Office of the Special Adviser on Africa (OSAA)**

Expert Group Meeting

“Natural Resources, Climate Change and Conflict in Africa: Protecting Africa’s
Natural Resource Base in Support of Durable Peace and Sustainable Development”

17-18 December 2009, Conference Room E, United Nations, New York

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List of Abbreviations

ADB	Asian Development Bank
AU	African Union
COP	Conference of Parties
EU	European Union
HLP	High-Level Panel
IOM	International Organisation for Migration
IPCC	Intergovernmental Panel on Climate Change
MDG	Millennium Development Goals
OSCE	Organisation for Security and Cooperation in Europe
PSIDS	Pacific Small Island Development States
SIDS	Small Island Development States
UK	United Kingdom of Great Britain and Northern Ireland
UN	United Nations
UNDP	UN Development Program
UNEP	UN Environment Program
UNFCCC	UN Framework Convention on Climate Change
UNGA	UN General Assembly
UNHCR	UN High Commissioner for Refugees
UNHRC	UN Human Rights Council
UNSC	UN Security Council
UNSG	UN Secretary-General

1 Introduction

Since late 2006, the impacts of climate change have consistently featured on top of the international policy agenda and news headlines. A vast body of literature developed exploring the consequences of climate change for human societies. The potential security implications of climate change have been one of the areas which received substantial attention by scientists and policy makers alike. The applied definition of security is varying: It ranges from impacts on food security and vulnerabilities to disasters on the one hand to increased risk of armed intra-state and inter-state conflict. In general, three main dimensions of climate change as a security threat can be distinguished:

- **Climate change will act as a threat multiplier** in many world regions. This approach argues that rising temperatures will not per se lead to conflicts and insecurities. However, climate change increases the risk of violent conflicts as it puts further stress on already fragile security situations.
- The vanishing of states and altering of national borders by rising sea levels fostered the perception that **climate change poses a new quality of security issues** to the international community. Such events are unprecedented in history and challenges conventional notions of statehood and citizenship. As there are no proven mechanisms to deal with them, they require new forms of conflict resolution on the international level.
- Climate change may furthermore pose **severe threats by radical and sudden changes** that may exacerbate environmental changes at an unexpected rate. Security risks result from low preparedness for and high impact of non-linear changes in climate.

In contrast to other global topics, the scientific discourse on climate change and security quickly entered the political arena, even though peace and conflict research in particular clearly signaled a note of caution: The European Union (EU) and several of its member states proactively pushed the debate on climate change and security. The United Kingdom of Great Britain and Northern Ireland (UK) put it onto the agenda of the UN Security Council (UNSC) in 2007. In June 2009, the UN General Assembly (UNGA) unanimously agreed at its 63th session to a resolution on “Climate change and its possible security implications”. The draft resolution was brought forward by the representative of Nauru on behalf of the Pacific Small Island Developing States (PSIDS) and was strongly supported by the EU. It had two main objectives (cf. UNGA 2009): The resolution called upon all relevant UN organs to **intensify their efforts** to address climate change and **suggested a comprehensive report of the UN Secretary-General** (UNSG) on the security implications of climate change to be submitted to the UN General Assembly.

The UNSG report that was delivered in September 2009 summarized the security implications of climate change and clearly marked the role of the UNFCCC as the central UN body for climate change negotiations (UNSG 2009). Together, UNGA

resolution and UNSG report **provide a political mandate and framework for action** for the UN.

Frequently, Africa has been considered as the continent which will be most impacted by climate change due to the combination of severe impacts of climate change, economies which are highly climate-dependent and comparatively low adaptation capacities (Brown/Crawford 2009). Concurrently, the risk of climate-induced armed conflict is often considered as high in Africa and recent estimates go as far as suggesting an increase of 54 percent of violent conflicts in Africa until 2030 compared to 1980-2000 (see Burke et al. 2009).

However, the (scientific) picture is not as clear as it appears at first glance: Case studies reveal that climate change and adaptation to it has been a constant fact of life across Africa without resulting in violence (see Brown/Crawford 2008). Also, while interlinkages and mechanisms how climate-related impacts translate into livelihood insecurity are relatively well known, how they further translate into violent conflict is still less understood.

Thus, the purpose of this paper is to reflect the current knowledge on interlinkages between climate change and security in the case of Africa. This will be done against the background of the emerging international policy response.

The paper is structured as follows:

- Chapter 2 will provide an overview to likely security implications of climate change in Africa. The chapter is conceptual and security is broadly defined. The focus will be on political instability and the potential violent conflict.
- Chapter 3 will provide an overview to approaches currently debated how to prevent climate-induced conflict.
- Chapter 4 will outline how the UN has so far addressed climate change-related security implications. Furthermore, it will explore how African nations have so far been engaged in the international process.

2 Climate Change and Security in Africa

Overall, Africa will be negatively affected by climate change. Even with carbon fertilisation, increased heat and water stress will reduce agricultural productivity significantly. Additionally, aside from increasing water stress, the severity of droughts will increase all over Africa and in particular in west and southern Africa (UNDP 2007: 92). **Regional variation of impacts is significant and current results contradict each other on occasion.** Regarding rainfall patterns in the Sahel, for example, studies have come to very different, partly contradicting conclusions (see IPCC 2007; Carius et al. 2008; cf. Brown/Crawford 2009). This makes it difficult to formulate concrete predictions for individual countries or identify potential (sub-) regional hot spots. Still, it

is noteworthy to mention, that Africa was the only region that the IPCC explicitly mentioned where climate change may contribute to violent conflict (IPCC 2007b: 442).

The population of Africa is rapidly growing and urbanising for the foreseeable future. Its demand for resources will continue, and increase, as well. Both are **major converging trends**, which will exacerbate the impacts of climate change as well. By and large, Africa is lagging behind Asian countries such as India and China regarding economic development. It is also significantly behind schedule regarding the Millennium Development Goals (MDGs) (see Martens 2007). Most African states currently face difficulties or fail to deliver basic services, while economic development can hardly substitute by providing the necessary funds. Aside from the **political fragility of many countries**, violent conflict remains prevalent throughout the continent, with the Sub-Saharan region from Central Africa to the Horn of Africa being particular worrisome (HIIK 2008). Globally, Africa is therefore seen often as the continent most likely at the risk of violent conflict due to its fragile situations, history of political and ethnic conflict and climate-dependent sectors (Brown/Crawford 2009).

At a closer look, however, regarding the impacts of climate change on violent conflict in the region, the results are mixed. There is **clear evidence that environment and natural resources are linked to violent conflict** (see Carius et al. 2006) and long-term projections indicate increased security risks associated with climate change. The conflict in Darfur has also been linked to changes in climate (cf. UNEP 2007), but this assertion has been criticised on various grounds (Brown/Crawford 2009). Scientific studies **correlating climatic change and conflict yielded few definite results** (e.g. Hendrix/Cullen 2007; Meier et al. 2007). Case studies have also shown that the likelihood of violent conflict as a result of resource scarcities and disputes is dependent on many other factors such as social institutions, resource governance, capacities and legitimacy of dispute settlement bodies and more (Brown/Crawford 2008). In fact, adaptation strategies to a changing climate have long been a part of life in Africa (Brown and Crawford 2008).

Thus, while science shows that the **impacts of climate change on human livelihoods in Africa will be severe**, the extent climate change will lead to violent conflict remains unclear. Indeed, authors have argued that climate change will not much change the current security situation in Africa, as the existing socio-political structures are already prone to violent conflict (see Lee 2009; Halden 2007). Generally, the following **conflict constellations** can be distinguished:¹

- Decreasing availability of fertile soils and water for food production and employment may spur **competition** between different groups. In areas of social, political and/or ethnic polarisation and incapable or perceived as inequitable governance, such competition could turn violent (WBGU 2007).
- Increasing variability resulting from climate change and decreased access to food and water will make the remaining productive lands more precious.

¹ Adapted from Brown/Crawford 2009; WBGU 2007; Buhaug et al. 2007; Maas/Tänzler 2009.

Indeed, a global food price hike would provide incentives to control productive lands and make a profit, while access to food could serve as political instrument to co-opt oppositions. Hence, **incentives to control resources access** may increase and become more politicised (see also Brown/Crawford 2009).

- Changing productive land patterns, changing patterns of diseases diminishing access to food, water and employment, as well as sea-level rise in densely populated areas such as West Africa may lead to increased **population movements** within and across countries. This could increase competition for resources and income in destination areas. As many countries are ethnically fragmented and polarised, the risk exists that this may turn violent as well (see WBGU 2007).
- The richness of Africa's natural resources will continue to draw external attention. Thus, globally increasing resource demands could manifest themselves in a **scramble for Africa** as international powers and companies attempt to secure supplies. In response to the food crisis, multiple countries from the Arabian Gulf, but also South Korea and others have invested in land in Africa to grow food crops, biofuels and others (Kumetat 2009; cf. Evans 2009). In case of Madagascar, such events have **accelerated the political crisis**. Hence, **climate change impacts elsewhere in the world** leading to decreased food supply may further exacerbate a 'land grab' in Africa by rich external countries (cf. GRAIN 2008).

None of these threats are particular new to Africa, but scale and frequency may increase by climate change. Particular if climate change is happening faster and more intensive due to failed mitigation policies, it could overstretch the capacities of local communities to adapt quickly enough socio-economic patterns and governance structures. If this fails, the risk of armed conflict increases.

In summary, climate change will act as a threat multiplier: It will definitely a challenge for development and human well-being in Africa. Where this is not well managed and result in polarisation of societies, it may create social friction and increase conflict potentials. Together, it may arrest and potentially reverse Africa's gains in development in the past years and continue to trap the continent in poverty (cf. Collier 2007).

3 Preventing Insecurity

There is consensus that the world climate will change and if we ensure that the global average temperatures does not rise more than 2°C above pre-industrial levels - which has become near-impossible to reach (Fetzek 2009) – will have dramatic consequences. For instance, it is estimated that 2°C alone would reduce food production in Central America (Fetzek 2009). and South East Asia (ADB 2009) by 20 percent and more. As demand for food, water and employment will rise simply due to

increasing population, even the 'best case scenario' will require action. There is consensus that **conflict-sensitive adaptation** will be a priority action for the future, particular in fragile contexts: Not only is it necessary to adapt to climate change impacts. It is necessary to do so in a way not to exacerbate existing disputes and conflicts or create even new ones (Carius et al. 2008; Tänzler et al. 2009).

However, acting on climate change implications for security is far more complex than simply increasing upscaling food production or other technical approaches to adaptation due to the uncertainty involved. Climate does not change in a linear manner and variability and unpredictability is likely to increase; weather patterns for instance can change within less than a decade (Vergara et al. 2009). Such rapid changes need to be factored in and challenges conventional planning which assumes that the environmental conditions are largely stable within parameters (see Paskal 2009).

Thus, solutions to climate-induced security implications need to be tailored to the specific socio-economic and geographic context. Still, within the literature on climate change and security, a set of actions have been identified which can be generalised for most regions:²

- **Further Research:** Most climate change models are global in their nature. Few scenarios exist for national or local scale. Most knowledge is available on impacts on industrialised countries, as their research centres have the necessary capacities and resources to conduct such endeavours. Thus, further research on sub-regional impacts of climate change is necessary in most areas around the world to understand, what these impacts will be and plan accordingly.
- **Awareness Raising:** In most regions, people and governments have started to recognise that weather patterns are changing. However, few link this with climate change and current development plans are not adapted to potential impacts of climate change. Improving awareness and spreading knowledge particularly in those communities who will be affected first will be critical in responding to climate change threats.
- **Stakeholder Dialogue:** Climate change is cutting across all segments of societies and does not respect borders. Coordination and communication within and between countries and communities will be necessary.
- **Regional Cooperation:** Particular water sharing agreements will need to be reviewed in the light of climate change. Rivers feeding from glaciers will be particularly affected; and so all riparian countries. Thus, improved regional cooperation and coordination will be necessary to managed shared resources.
- **Capacity Building:** Existing tools are often inadequate to cope with the problems of uncertainty and impacts of climate. They often need to be adapted, and new tools developed, to adequately cope with climate change. In addition,

² Adapted from Maas/Tänzler 2009 and Carius/Maas 2009.

widening research competence and capacities for assessment and analysis on national and local levels around the world will be necessary.

- **Defusing Interconnected Crisis:** In several regions, countries are dependent on single resources. For instance in case of South East Asia, the region is dependent on the Mekong for food, water, and electricity. A likely decrease of water flows in dry seasons will thus negatively affect access to food, energy and water. Consequently, integrated risk reduction policies and mainstreaming climate change need to be key priorities for improving resilience and decreasing vulnerabilities.
- **Priority Regions:** While generally the poor will be the most affected, the literature identified two areas for intervention. First, those which are currently living in fragile situations, which climate change may likely further aggravated and prevent overcoming fragile situations. Second, economic hubs or pivotal areas which are central for development and political and economic activity is concentrated. This includes major regional powers important for international stability or major urban areas within states.
- **International System Development:** The different international frameworks working on issues related to climate change – mitigation and adaptation, emission trading, food, water, energy, etc. – need to be linked and integrated to allow for a comprehensive approach. This includes developing global early warning and information networks on climate change and security.
- **No-regret measures:** The large amount of uncertainty makes many policy makers hesitate to act. As financial and human resources are limited, yet the concrete impacts are not well know, experts have argued for so-called “no-regret measures”. Such measures are defined by having benefits regardless whether the level of climate change impacts. They include typically disaster risk reduction by improving building codes and improving resource efficiency (particular water and energy).
- **Threat Minimisers:** UN Secretary-General Ban Ki-moon noted in his report on climate change and security (see next chapter) that strengthening **threat minimisers** would be a key strategy to counter climate change-related security impacts. They are similar to no-regret measures, but instead focus on transparency, good governance and related socio-political actions which improve the capacities of societies to defuse disputes and develop inclusive policies.

4 Responses

The international response to potential security implications of climate change has been strongly driven by the European Union (EU) and its Member States. Indeed, the EU considers climate change as major threat to its interests, as well as to international security and stability (EU 2008). Aside from consultations and studies conducted by the European Commission, particular the UK, Germany, Sweden, Denmark, Greece, Finland and Spain have been active within the EU, the UN and the Organisation for Security and Cooperation in Europe (OSCE). While other countries do not question the challenges climate change is posing, their perspective has been different (see e.g. UNSC 2007; ARF 2009). Notably, African countries have been mostly absent from the international debate on this matter so far. Only the Seychelles provided a statement to the draft comprehensive report of the UN Secretary-General on the security implications of climate change earlier this year and another 13 supported the respective UNGA resolution³.

How the issue is discussed on the political and technical level in the UN will be elaborated further below. In addition, an explanation is offered, why the security implications of climate change have not yet draw significant attention of African countries.

4.1 The United Nations

Within the United Nations, potential security implications of climate change or environmental change is not a new topic: They were tabled among others in the context of the United Nations in 2002 during the UN Framework Convention of Climate Change (UNFCCC) conference of parties (COP) in Bonn. The German Ministry for the environment presented a paper on climate change and conflict prevention (see Oberthür et al. 2002). In 2004, the Secretary-General's High-Level Panel on Threats, Challenges and Change also explicitly referred to security threats resulting from environmental degradation (HLP 2004). However, while reports were written and isolated statements by member states were done, the topic as a whole remained off the agenda of the UN.

This changed in 2007, when the UN began to take up the security implications of climate change on multiple levels:

Climate change and its possible security implications also appeared on the agenda of many **technical bodies**. The focus of these activities has been largely on conceptualising the potential threats of climate change and assessing its concrete implications:

³ The following African countries supported the UNGA resolution: Angola, Burkina Faso, Burundi, Cape Verde, Comoros, Gabon, Gambia, Madagascar, Mauritius, Morocco, Togo, Egypt and Libya.

Most prominently, the UN Development Program (UNDP) focused in its human development report (HDR) 2007/2008 on climate change and particular its consequences for human security (UNDP 2007). The United Nations High Commissioner for Refugees (UNHCR) was one of the first to explicitly mention climate change as a threat to international security, stating that related to climate change effects “(i)ncreased social tension and political conflict is thus likely, both within and between states” (UNHCR 2008: 3).

However, UNHCR also pointed to the fact, that there is a lack of understanding of the relationship between climate change, environmental degradation, armed conflict, displacement and migration (UNHCR 2008: 8). Similarly, the International Organisation for Migration (IOM) began to assess the challenges resulting from climate-induced migration, including conflict risks (IOM 2008). The World Bank is researching the linkages between climate change and violence prevention (see Buhaug et al. 2008), while the UN Environment Program (UNEP) currently assesses the role of adaptation to climate change in post-conflict situations. This assessment is part of a broader agenda on natural resources, conflict and peacebuilding of UNEP’s Post-Conflict and Disaster Programme which became one of the six future priority areas of UNEP.

However, few concrete projects have been conducted. A key challenge is to operationalise the challenges of climate change in a convincing way, as contemporary development priorities must be judged against potential future impacts (Carius/Maas forthcoming). The UNDP’s Pacific Centre has developed a proposal to work on the interface between climate change, disasters and conflict on the Pacific island states.⁴ It is among the first to address climate change in the context of adaptation.

On the political level, the United Kingdom of Great Britain and Northern Ireland (UK) used its UN Security Council (UNSC) presidency to discuss in April 2007 the security implications of climate change. It was the first time ever for the UNSC to debate this topic and more than 50 delegations delivered statements. The issue was controversially discussed and neither a resolution nor presidential statement was issued. Many countries, particular India, China and the G77 objected to discuss climate change in the context of international security and particularly in the UN Security Council. They argued that climate change as a socio-economic development issue ought to be dealt with by the General Assembly and the Economic and Social Council ensuring a wider representation (UNSC 2007).

Development policy and the work done within the framework of the United Nations Convention on Climate Change (UNFCCC) are considered as more adequate bodies to cope with climate change (UNSC 2007). This is in line with the interest of several developed countries, as adaptation will be critical for preventing climate-induced conflict.⁵ Indeed, several options are plausible how adaptation could be fruitfully linked with conflict prevention and peacebuilding (Tänzler et al. 2009). However, particular negotiators are opposed to include security implications of climate change or any

⁴ Interview with UNDP representative, New York, 11 June 2009.

⁵ Interview with EU Member State official via phone, October 2009.

related issue in the UNFCCC negotiations, as it would make reaching consensus even more difficult. Unsurprisingly, despite side-events organised during the Poznan (2008) and Copenhagen (2009) conferences, the issue has not been taken up yet.

While the UNSC debate remained without conclusions and the UNFCCC has not yet addressed the issue, climate change's implications were debated in multiple fora, bodies and agencies from 2007 to 2009. This includes the Human Rights Council (UNHRC 2008) focusing on the implications of climate change for human rights and adopting resolution 7/23 "Human Rights and Climate Change" in March 2008. The political debate within the UN would continue and climaxed in the **UN General Assembly (UNGA) resolution A/63/281** (UNGA 2009). The process leading to the resolution was driven by the small island developing states (SIDS) and EU Member States. The resolution is noteworthy in two respects:

- First, it requested the UN Secretary-General (UNSG) to produce a comprehensive report on climate change and its potential security implications (UNSG 2009). The UNSG invited all member states, observers and UN bodies to submit perspective on the matter before a final report was published in late 2009. The report establishes the relevance of the issue and identifies five potential issues how climate change impacts could translate into security threats.
- Second, the resolution calls upon all relevant UN organs to intensify their efforts as appropriate within their mandates in addressing the possible security implications of climate change. As climate change may affect a wide spectrum of issues from food security to conflicts over scarce the resources, this call is flexible enough to heeded by most UN organs.

Together, **UNGA resolution and UNSG report provide a political mandate and framework for action for the UN**. However, while UN bodies can refer to the UNGA resolution and reflect the findings of the UNSG report against their respective mandate, few UN bodies went any further. Still, while the climate change and security is unlikely to advance much further within the next years on the political level, the recent activities established the relevance of the topic. It is now up to UN family to take up the challenges of climate change for security.

4.2 Perspectives from and on Africa

Climate change has been repetitively called a major threat for Africa and that the continent is having the least capacities to adapt (Erhart et al. 2008). In addition, major trends which will exacerbate the impacts of climate change such as urbanisation and population growth are above the global average. There are multiple studies, reports, political documents and scientific articles discussing the impacts of climate change on security and stability in Africa as seen in section 2 of this paper. One of the most recent studies assumes that climate change will lead to a statistical increase of 54 percent of armed conflict by 2030 (Burke et al. 2009). The likely security implications of climate

change were also put on the agenda of the joint Nordic-African foreign ministers summit in March 2009 (Brown/Crawford 2009).

Ugandan president Yoweri Museveni is famously quoted as calling climate change an aggressive act of the developed world against the developing world (Masood 2007). However, while several African countries participated in the UNSC debate in April 2007 and aligned themselves with the statement of G77 on the issue (G77 2007), none except for the Seychelles submitted and agreed to publish their perspectives on the UNSG report.

Given the vulnerability and potential impacts of climate change this appears surprising at first glance. A closer look at the contributions in the UNSC debate reveals that contemporary challenges for Africa are already so mounting, that climate change appears as just another challenge: The continent is in large parts severely off-track with regard to MDGs. Many countries continue to suffer from violence and instability. Disputes over natural resources are already a reality in many countries. Scientists such as Larry Swatuk from Botswana assess that climate change will not much alter the security situation in the region: From a humanitarian point of view, the situation may worsen, but it does not create new challenges (Swatuk 2007).

Indeed, African societies revealed resourcefulness in coping with adverse change despite very low levels of development without social collapse (Ibid.). Also, threats of climate change are not denied and the African Union (AU) debated its impacts on the 8th Summit of the AU in 2007. However, the debate on climate change and security is largely driven by western countries and research organisations. It comes on top of the challenges Africa is facing today and is not without cynicism as western countries are historically responsible for climate change. The representative of Ghana summarised the issue of the novelty of climate change as security challenges as follows:

“Ultimately, it makes no difference whether the risk of conflict stems from the scramble over dwindling water resources or from the shrinking of productive land owing to the changing rainfall pattern or from the inequitable distribution of oil revenues coupled with severe environmental damage affecting communities.” (UNSC 2007)

Climate change and climate variability does not pose an entirely new threat to Africa. It adds to the existing stresses. Addressing these challenges and improving non-violent dispute settlement over natural resources will thus not only support handling the impacts of climate change: It would be a major step towards addressing existing threats and challenges. This does not imply that climate change is only a minor nuisance. But it is necessary to keep in mind that addressing contemporary challenges is not less important than building up resilience to withstand climate change impacts.

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