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Abstract

Evidence of the impacts of climate change on human security in Africa, with reference to migration and water-related conflict

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Literature between the 1990s and today, including the 4th Assessment report, has indicated that climate change will unleash widespread environmentally-related stressors in vulnerable developing countries. Additional research has then pointed to the possibility of violent conflict, particularly referencing "climate refugees" and "water wars" in Africa. This additional research has contributed to the securitization of climate change and its projected impacts. This paper challenges those notions and attempts to fill knowledge gaps with recent fieldwork results from work on migration and water conflict in Africa. The paper highlights some of the empirical evidence about migration and water-related local level tensions pose in a period when climate change increases the potential for social stress and violent conflict.

Migration: Claims have been made that global environmental change could drive anywhere from 50 to almost 700 million people to migrate by 2050. These claims belie the complexity of the multi-causal relationship between coupled social-ecological systems and human mobility, yet they have fuelled the debate about "environmentally induced migration". Empirical evidence, notably from a 23 case study scoping study, confirms that currently environmental factors are one of many variables driving migration. The environmental signal in migration patterns may grow as the impacts of climatic and societal change become more apparent.

Water scarcity and local level conflict: The discourse on water and violence so far has much focused on the "water wars"- hypothesis. Over the last decades a huge amount of studies has been published either favouring or challenging the 'water war' thesis. At present, triggered by the climate change discourse, the dominating opinion in the research community is that water is - and will become increasingly - a source of violent conflict not in the international realm, but in the sub-national or local context. The way these conflicts evolve depends highly on the availability and functioning of local level institutions or mechanisms. Findings from field research confirm the importance of emergent local level governance structures to proper manage water resources as well as to prevent and manage water resources related conflicts.

This diversity of migration potentials linked to environmental change and the increasing pressure on water resources present challenges to governance systems not designed to cope with the impacts of complex causality, surprises and uncertainty about social-ecological thresholds, and the possibility of environmental and migration patterns recombining into a new patterns.

The paper concludes that climate change is influencing the physical tipping points for resources such as water and soil. This in turn challenges the robustness of social institutions and adaptive capacity of African population. Our findings do not support the "securitization of climate change" argument. The paper draws conclusions and points to research gaps and policy areas that require further analysis in the future.