

**FRAGILE ENVIRONMENT, FRAGILE STATE:  
WHAT ROLE FOR CONFLICT-SENSITIVITY AND PEACE-BUILDING?  
A DISCUSSION PAPER**

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**RECLAIMING THE COMMONS:  
PROMOTING A NORTH-SOUTH AGENDA FOR ENVIRONMENTAL JUSTICE**

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# FRAGILE ENVIRONMENT, FRAGILE STATE: WHAT ROLE FOR CONFLICT-SENSITIVITY AND PEACE-BUILDING?

## 1.0 SUMMARY

This briefing note is the third in a series of three CCIC background papers for the January 2009 *Reclaiming the Commons* Policy Roundtable. The papers illustrate environmental justice dimensions in CCIC policy work on: Aid and Development; Trade and Economic Justice; and Peace and Conflict. This paper provides a brief overview of links between environmental injustice and violent conflict and examines how climate change may affect conflict-prone fragile states. It calls for an integration of conflict-sensitive and peace-building approaches into climate change adaptation strategies.

## 2.0 BACKGROUND

*“Peace, development and environmental protection are interdependent and indivisible.”*

Principle 25, Rio Declaration on Environment and Development

The quest for environmental justice is an integral part of social justice, human rights and women’s rights, and the promotion of peace. Environmental injustices such as unfair access to land and water can contribute to poverty, marginalization, and violent conflict. Analysts in the peace and conflict field tend to focus on three rationales linking the environment and violent conflict: the distribution of natural resources; competition over natural resources; and environmental degradation. Climate change and its adverse consequences such as drought, desertification and flooding add a new dimension to links between violent conflict and the environment.

Distribution-based conflicts arise, in part, from poor state policies to ensure equitable access to water, land, forests, pasture, fisheries, etc. The state’s ability to govern and manage the distribution of natural resources according to need, for example, across regions, ethnic / tribal groups, or other communal demarcations, influences the extent to which environmental resources become a factor in political and social instability. In fragile states, characterized by weak institutions, management of natural resources can easily pose a challenge to state capacity. Grievances over unfair access to resources can easily combine with other social, cultural, economic or political factors leading to violent conflict. Climate change impacts such as drought and unpredictable rainfall can be an added pressure on fragile states that already have limited capacity to respond to crisis and poverty.

Competition over resources combined with poor means to manage such competition can lead to violent conflict.<sup>1</sup> Often termed as “resource scarcity”, violent conflicts emerge when communities struggle over access to limited resources. Conversely, resource-based conflicts can also include environments with an abundance of natural wealth, but where natural resources are plundered and exploited by armed groups, multinational corporations, and profiteering

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<sup>1</sup> OECD DAC. *Conflict, Peace and Development Co-operation on the Threshold of the 21st Century*, 1997.

individuals. In this scenario, the rights of local communities are discarded by those willing to exploit the earth's riches. Resource extraction and exploitation has been linked to violent conflicts in the Democratic Republic of Congo, Sierra Leone, and Angola. By altering either the scarcity of abundance or natural resources, climate change is an added factor that needs to be considered in assessing the causes of conflict and predicting the pattern for future instability and violence.

Environmental degradation can increase the likelihood of poverty and aggravate conflicts. Depleted fish stocks, deforestation, and polluted water supplies, can lead to scarcity of resources and displace communities from traditional lands. Displacement can have adverse consequences on communities who depend on traditional and ancestral lands for basic sustenance, livelihood, and cultural survival. The fall-out from global warming such as increased drought and unpredictable precipitation, particularly in Africa, is expected to combine with existing environmental degradation adding pressure on fragile state systems and local communities' resilience.

The equitable management of natural resources and preventing environmental degradation, resource exploitation, and resource competition, is already a challenge for many developing countries. In fragile states, climate change will make this already tough job even harder.

### **3.0 CLIMATE CHANGE AND FRAGILE STATES**

The body of work on fragile states and climate change is nascent, and at present there is a risk of framing climate change as a security risk. Sometimes termed "climate-security", climate change is described as a threat, particularly to wealthy western nations. Mass migration of people in the global South due to more frequent or intense disasters is seen as an international security issue. Rather than looking at adaptive capacities of states and vulnerabilities of communities most impacted by global warming in the global South, the security of western states is emphasized to the neglect of the rights of the most affected, women and men, in the South.

International Alert (IA) in its *Climate of Conflict* report identifies political instability, economic weakness, food insecurity, and large-scale migration, as four risk factors which could propel violence in under-developed countries. According to the report there are 46 countries, totaling a population of 2.7 billion, considered high risk for near-term violence due to the impacts of climate change compounding existing economic, social, and political tensions.<sup>2</sup> A further 56 countries are identified as being vulnerable to political instability. In this group of 56, over the longer term the effects of climate change could lead to violence and instability. IA states that in the group of 46 countries, governments and citizens will face the immediate dual challenge of climate change and violent conflict.

The International Crisis Group (ICG) identifies three factors affecting vulnerability to climate change:

- ❑ "The extent to which societies are dependent on natural resources and ecosystem services;

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<sup>2</sup> For the full list of countries, see International Alert, *A Climate of Conflict*, November 2007: [http://www.international-alert.org/pdf/A\\_Climate\\_Of\\_Conflict.pdf](http://www.international-alert.org/pdf/A_Climate_Of_Conflict.pdf) (accessed December 20, 2008).

- ❑ The extent to which the resources and services that societies do rely on are sensitive to changes in climate; and
- ❑ Adaptive capacity – the capacity of societies to adapt to changes in these resources and services.”<sup>3</sup>

According to the ICG and IA, climate change does not have a causal relationship to violent conflict. Without adopting the security logic of climate change, what then can be taken from these nascent attempts to assess the implication of climate change for fragile states? First, climate change will pose an added challenge for fragile states with weak governance capacity. Second, climate change is likely to make worse environmental degradation thereby adding pressure on the resilience of local communities and the state. Third, climate change could compound other socio-economic and political tensions, particularly in societies dependent on natural resources for immediate sustenance and livelihood.

#### **4.0 ENVIRONMENTAL DEGRADATION, CLIMATE CHANGE AND FRAGILE STATES: MAKING A BAD SITUATION WORSE IN AFRICA**

*“...market reforms led to the further commodification of Africa’s natural resources, such as forests, water and minerals, opening them up to increased exploitation (and degradation) for profit by the state, its business partners and multinational corporations. Even the poor who were further impoverished by crisis of structural adjustment also turned to the environment for cheaper food, fuel, and livelihoods. In this dire struggle for survival, the ongoing exploitation of environmental resources was overlooked...”*<sup>4</sup>

Cyril I. Obi, UNRISD

The impacts of climate change must be seen as an additional crisis on top of existing environmental crisis entrenched in the commodification of natural resources and a pillaging of the global commons. Climate change is accelerating adverse impacts of environmental degradation. Ninety percent of the people exposed to disasters live in the developing world.<sup>5</sup> Undoubtedly, those that will feel climate change’s harmful effects the most, will be poor and marginalized women, men, and children. In addition to existing challenge of poverty, climate change will add another pressure on developing states capacities to adapt and respond to crisis.

Freshwater, agricultural land, forests, and fisheries are key to sustenance and livelihood to communities in many developing countries. Environmental degradation of these resources can jeopardize livelihoods, increase food and water insecurity, and, thereby contribute to conditions that enable and sustain violent conflict. In areas such as the Africa’s Sahel belt, even a small increase in temperature could lead to, or prolong drought, in turn jeopardizing food production.

<sup>3</sup> See Climate Change and Conflict pages on the International Crisis Group website: <http://www.crisisgroup.org/home/index.cfm?id=4932&l=1>.

<sup>4</sup> Cyril I. Obi. *Environmental Movements in Sub-Saharan Africa: A Political Ecology of Power and Conflict*, UNRISD Programme on Civil Society and Social Movements, Paper Number 15, January 2005.

<sup>5</sup> United Nations Environment Program. *Global Environment Outlook (GEO) Report*, 2007.

A correlation between drought and conflict already exists in Africa, in large part due to increases in competition over land, water, and pastures.<sup>6</sup>

Desertification is reducing the amount of land available for cultivation and this has led to conflicts between herders and farmers in the Sahel region, including Sudan and Kenya. According to the German Advisory Council on Global Change, global warming of 2–4 °C will lead to a drop in agricultural productivity worldwide. Further, the Council points out that in South Asia and North Africa, agricultural lands are already largely exploited.

Global warming's effects on drought and flooding patterns, leading to shorter growing seasons in some areas and increased flooding in others, will lead to crop failure undermining food security, jeopardizing livelihoods, and altering cultural practices and relationships with land.

An estimated 430 million people already face insufficient access to water. Changes to rainfall patterns, availability of freshwater sources, and growing demand for drinking water from a growing global population is a huge challenge for water management. If trends continue at the current rate the UN estimates that 1.8 billion people will be living in areas of absolute water scarcity by 2025, and some two-thirds of the world's population could be under water-stress.<sup>7</sup> Environmental degradation can pollute and reduce fresh water supplies, adding to pressures on access to water. Climate change is expected to further reduce the supply of fresh water increasing pressure for safe drinking water.

#### **4.1 The Case of Kenya**

Northern Kenya had been plagued by low-intensity violent clashes between clans over the last 15 years. Causes of these conflicts include competition between different pastoral clans seeking water for livestock, as well as competition with the local farming communities over grazing land.

Northern Kenya has been affected by prolonged drought for the past 10 years due to changes in rainfall patterns. Over 80 percent of Kenya's landmass is arid or semi-arid and receives low and unevenly distributed rainfall<sup>8</sup>. The unpredictability of the rains has also caused challenges for farmers in planting and harvesting their crops. Climate variability and change will undoubtedly make this situation worse. According to the Intergovernmental Panel on Climate Change (IPCC), significant declines in rainfall particularly in arid and semi-arid regions are expected over the next 10 to 15 years.<sup>9</sup> The IISD notes that "...this additional stress further threatens the water and lands upon which smallholder farmers rely for their livelihoods, health and well-being."<sup>10</sup> In response to the increased vulnerabilities faced by farmers, some organizations have been calling for more programming for agricultural production.

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<sup>6</sup> See Edwin Rutto monitoring of drought and conflict for the Africa Peace Forum, and Christian Aid, *The Climate of Poverty: facts, fears, and hopes* (May 2006).

<sup>7</sup> United Nations Environment Program, *Global Environment Outlook (GEO) Report*, 2007.

<sup>8</sup> According to the Arid Lands Resource Management Project (ALRMP): <http://www.aridland.go.ke/index.php>.

<sup>9</sup> As a side note, after 2025 the Intergovernmental Panel on Climate Change's predicts more intense rain fall during the short rains season, which would once again alter growing and grazing patterns. The post-2025 scenario is not examined in depth in this paper.

<sup>10</sup> Jo-Ellen Parry, International Institute for Sustainable Development, *Preparing for Climate Change in Kenya: Early Outcomes of the Project*, 2008.

Northern Kenya's is also inhabited by numerous pastoral communities who base their lives and livelihood on herding animals. Pastoralists are among the most poor and vulnerable in Kenya. The highest levels of poverty ranging between 84 to 95 percent are found in the northern pastoralist districts, compared with a national average of 53 percent.<sup>11</sup> According to Oxfam International, livestock production from pastoralists contributes significantly to Kenya's GDP, amounting to 10 percent in 2002, and 25 percent in 2001.<sup>12</sup> The livestock sector accounts for 90 percent of employment in the arid and semi-arid lands.<sup>13</sup> Despite pastoralists' economic contribution, pastoral communities remain marginalized with the arid-and semi-arid regions in northern Kenya under-developed and neglected.

As 10 years of drought have taken their toll on communities, clashes have occurred between different pastoral groups over access to water bore-holes for their livestock. As bore-holes have dried up, the limited access to water has been an increasing source of contention. Pastoralists have also been forced to seek new grazing lands, sometimes encroaching on cropland used by farmers leading to occasional episodes of violence. Since grazing land also makes good crop land for agricultural production, without concerted efforts, government policies and international development efforts could easily feed the conflicts between pastoralists and farming communities.

Pastoralist and farming communities need not be in conflict with one another. Cooperative and complimentary policies in adapting to climate change could not only minimize existing levels of violence, but help build co-operation across communities.

However, if the pattern of neglecting pastoral rights and favouring inequitable development strategies based on inappropriate farming models continues, conflict and instability may ensue.<sup>14</sup>

#### **4.2 The Case of Darfur, Sudan**

*“The scale of historical climate change, as recorded in Northern Darfur, is almost unprecedented: the reduction in rainfall has turned millions of hectares of already marginal semi-desert grazing land into desert. The impact of climate change is considered to be directly related to the conflict in the region, as desertification has added significantly to the stress on the livelihoods of pastoralist societies, forcing them to move south to find pasture.”*

Post-Conflict Environmental Assessment  
The UN Environment Programme (UNEP), 2007

Causes of the conflict in Sudan's Darfur region include environmental degradation in addition to economic and political factors. Most of Sudan lies in the Sahel, a region recognized by the Intergovernmental Panel for Climate Change (IPCC) as the most vulnerable in the world to droughts. Similarly to Kenya, and the rest of the Sahel belt, tensions over land and grazing

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<sup>11</sup> Kenya National Bureau of Statistics (2007) “Basic Report on Wellbeing based on the 2005-2006 Kenya Integrated Household Budget Survey”, April, cited by Oxfam International, *Survival of the Fittest*, August 2008.

<sup>12</sup> Oxfam International, *Survival of the Fittest*, August 2008.

<sup>13</sup> *Ibid.*

<sup>14</sup> For more on critiques of inappropriate farming models, see: Oxfam International, *Survival of the Fittest*, August 2008.

rights between pastoralists and farmers have long existed. However, with the intensification of drought, pressure for scarce water and pasture have also increased, adding to an already complex and brutal conflict.

According to the UN Environment Programme (UNEP) report, rain-fed agricultural land increased by 138 percent in Southern Darfur, while rangeland decreased by 56 percent and woodland by 32 percent. The same report warned that the degradation of rangelands in the northern part of the Sahel would make the situation even worse and add to pressure on both pastoralist and farming communities for both land and water.<sup>15</sup>

The Sudan example illustrates the additional challenge that climate change will pose to fragile states, particularly conflict-affected fragile states. The impacts of environmental degradation and climate change cannot be seen outside of the political context of the State's relations with its citizens. As such, examining how the Sudanese government, and the international community, has responded to the increased vulnerability brought on by climate change is critical. Indeed, many conflict analysts have warned that the conflict in Darfur cannot be singularly attributed to climate change impacts or to being a resource-based conflict between tribes. What is important to consider, is the governments management of natural resources with different tribes, ethnic groups, and other communities living within its population, and its inability or unwillingness to respond to increased tensions brought about by the degradation of natural resources caused by climate change.

## **5.0 POLICY CONSIDERATIONS**

### **5.1 Lessons from Conflict-Sensitive Development for Adaptation**

#### **5.1.1 Conflict-Sensitive Development**

Conflict sensitive development, often referred to as do-no-harm approaches, seeks to ensure that development programs and projects do not unintentionally increase social and political tensions. Do-no-harm approaches are intended for societies at risk of, prone to, or affected by, violent conflict or crisis. Conflict-sensitivity is based on an analysis of: the root and trigger causes of conflict; stakeholders and affected groups; and the political context in which a program is being implemented. Measures to promote social tolerance and non-discrimination, include and empower marginalized groups, and ensure fair access to program benefits, are examples of conflict-sensitivity. The approach also involves efforts to explicitly address power relations in order to prevent inadvertently re-enforcing unjust power dynamics.

#### **5.1.2 Adaptation**

The Intergovernmental Panel on Climate Change (IPCC) defines adaptation as: “Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.” Adaptive capacity is defined as the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, take advantage of opportunities, or to cope with the consequences.<sup>16</sup>

<sup>15</sup> Post-Conflict Environmental Assessment , The UN Environment Programme (UNEP), 2007.

<sup>16</sup> Intergovernmental Panel on Climate Change, Fourth Assessment Report, Working Group II Report “Impacts, Adaptation and Vulnerability”: <http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-app.pdf>.

The IPCC has three categories for adaptation:

- ❑ *Anticipatory or Proactive Adaptation* – Adaptation that takes place before impacts of climate change are observed.
- ❑ *Autonomous or Spontaneous Adaptation* – Adaptation that does not constitute a conscious response to climatic stimuli but is triggered by ecological changes in natural systems and by market or welfare changes in human systems.
- ❑ *Planned Adaptation* – Adaptation that is the result of a deliberate policy decision, based on an awareness that conditions have changed or are about to change and that action is required to return to, maintain, or achieve a desired state.

### 5.1.3 Conflict-Sensitive Adaptation

Development agencies have been calling for climate change adaptation funds to assist poor and vulnerable communities in developing countries adapt to adverse climate change impacts. Funding for adaptation is critical since those that will bear the brunt of climate change, and those least able to adapt, will be the most poor and vulnerable communities around the world, particularly in the global South. Conflict-prone fragile states are likely to be overstretched in their institutional capacity to adapt quickly and effectively. And, the resilience of vulnerable communities will be under even more pressure. Clearly, adaptation strategies are required to cope with the impacts of climate change.

In conflict-prone fragile states, unless adaptation strategies consider the additional element of conflict-sensitivity ensuring the adaptation strategies do not inadvertently contribute to social tensions, adaptation efforts could unintentionally contribute to instability and conflict. For example, the case of northern Kenya shows that simply increasing agriculture production in arid and semi-arid regions to increase food security could cause tensions with pastoral communities if pastoralists' needs for grazing land and access to water are not considered. The experience garnered from conflict-sensitive development assistance over the past 15 years can illustrate lessons and suggestions for the way in which adaptation programming can be carried out in conflict-affected countries.

Adaptation efforts can support peace by enabling communities in fragile states to increase their resilience to adapt to climate hazards earlier. Proactive and Planned Adaptation strategies could help build the capacity of the state and communities in fragile contexts to prevent an over-burdening on both state systems and community coping mechanisms. Adaptation efforts could also promote social justice, human and women's rights, and gender equality by ensuring the adaptation efforts are accessible and responsive to women and men in vulnerable and marginalized communities. Such an approach can help prevent violence and build the conditions for a just and peaceful society. Adaptation, in this sense, could also have a conflict prevention benefit.

However, to date, there appears to be minimal to no guidance on integrating conflict-sensitive approaches into adaptation programs and policies. There has been no clear articulation of peace and conflict considerations in existing adaptation frameworks or policy statements. For example, the UNDP's Adaptation Policy Framework for Climate Change sets out five steps to formulating

adaptation projects, including assessing vulnerabilities and future risks. Socio-economic analysis is included in these steps, but there is no specific mention of conflict analysis. Nor is their contextual analysis of working in fragile or conflict-affected states. The lack of specific conflict-analysis for adaptation programs in conflict-prone fragile states in the UNDP framework is indicative of a general gap in linking climate change adaptation and conflict / fragility agendas. While links between environmental degradation, natural resources and conflict have been established, much more needs to be done to integrate these learning's into adaptation frameworks at international and national levels.

## **5.2 Climate Change Adaptation and Peace-Building**

Peace-building refers to a spectrum of activities and goals undertaken at international, national, and local levels in societies affected by violent conflict. While the term originally applied more specifically to the post-conflict context, it is now used more broadly to refer to a set of activities that help promote stability and end direct violence.

Peace-building practitioners are aware of the need for environmentally sustainable programs recognizing the links between natural resources and conflict in places like Sudan and Kenya. However, the peace-building community appears to be just realizing the need to tackle the issue of climate change specifically in their policies and programs. Similarly to integrating conflict-sensitive approaches with adaptation, peace-building practitioners and policy-makers have not yet focused substantively on the implications of climate change on their work, or, on how peace-building programs may need to be more climate-sensitive.<sup>17</sup>

In the case of Darfur, UNEP found extensive deforestation as far as 10 km from displacement camps. The deforestation was due in part to fire-wood gathering practices of people living in the camps who rely on fire-wood for fuel to cook food. UNEP also found that brick-making programs intended as livelihood and income generating projects for the displaced were also contributing to deforestation since trees are needed to provide the fire for making bricks.

The Darfur example reveals the substantial extent to which displacement camps can impact the environment and therefore the need for integrating environment and climate change considerations in camp planning. Deforestation can eventually limit the fire-wood supply depended upon by families in the camps for fuel, in turn, with adverse consequences on the basic sustenance of vulnerable populations. And, over the long term, deforestation can lead to land degradation, which again, will only be made worse by climate change, and will have a devastating toll on local communities by reducing food and fire-wood supplies.

Peace-building, crisis response, and recovery programs need to develop means to include consideration for climate change in program design and policies. Policy-makers and programmers also need to consider ways in which to leave the smallest environmental footprint possible for the long-term welfare of communities.

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<sup>17</sup> Term used by International Alert to link peace-building and climate change, see International Alert, *A Climate of Conflict*, November 2007: [http://www.international-alert.org/pdf/A\\_Climate\\_Of\\_Conflict.pdf](http://www.international-alert.org/pdf/A_Climate_Of_Conflict.pdf) (accessed December 20, 2008).

The environment, and even climate change, could also offer peace-building opportunities in conflict-affected areas. For example, International Alert suggests climate change could be a mobilizing point around which antagonists could see a common threat and unifying purpose. UNEP has been undertaking research on the role of natural resources and the environment in peace-making. In *The Case for Environmental Peacemaking*, Professor Ken Conca explains that cooperation over natural resources can establish collaborative and co-operative relationships over sharing resources on a small scale between parties to conflict. According to Conca shared resource systems and ecological interdependencies are part of a durable peace.<sup>18</sup>

However, similarly to the links between conflict-sensitive development and adaptation, the links between peace-building and climate change are nascent. More needs to be done to engage conflict-analysis and peace-building practitioners in climate change adaptation discourses. The peace-building community in turn needs to be more pro-active in engaging in the new field of adaptation work.

## **6.0 CONCLUSION**

The consequences of global warming are proving to be a further injustice on the world's poor, jeopardizing the fulfillment of basic rights to land, sustenance, and livelihood. Climate change is yet another injustice rooted in the commodification of natural resources and the exploitation of the global commons. Environmental injustice such as unfair access to land and water can contribute to poverty, marginalization, and violent conflict. As such, the just and equitable management of natural resources are vital to both sustainable development and a durable peace.

Concerted efforts are required to ensure the adverse climate change impacts such as desertification, deforestation, drought, flooding, and changes in rainfall, do not compound the vulnerability of women and men to poverty and violent conflict. In conflict-prone fragile states, both the resilience of states and citizens will face yet another undue stress on systems and coping mechanisms. Linking adaptation and conflict-sensitive and peace-building agendas in conflict-prone fragile states can contribute to ensuring that the rights of those most adversely affected by climate change are protected.

### **Five points for integrating climate change adaptation in conflict-prone fragile states:**

1. Fragile states policies should include specific consideration for climate change adaptation, including an assessment of state capacities. In fragile states, climate change adaptation, should be integrated into poverty reduction and peace-building frameworks including in National Adaptation Plans of Actions (NAPAs) and Poverty Reduction Strategy Papers (PRSPs).
2. Strategic Environmental Assessments (SEAs) and Environmental Impact Assessments (EIAs) should include conflict analysis in fragile states, and consider specific impacts brought on by climate change, including by undertaking adaptation assessments.

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<sup>18</sup> Eds. Ken Conca and Geoffrey D. Dabelko, *Environmental Peacemaking*, Woodrow Wilson Center Press, 2002.

3. Peace-building and early recovery policies and programs should include considerations for environmental impact on vulnerable women and men, and specifically strengthening the adaptive capacities of states and local communities.
4. Conflict early warning and fragile states policies should include an assessment of additional risk posed to vulnerable communities in specific conflict-prone countries for impacts of climate change.
5. Adaptation programs in conflict-prone countries should integrate lessons on conflict-sensitive development.