

# **From Conflict to Peacebuilding: The Role of Natural Resources and Environment**

*A PBSO Briefing Paper prepared in cooperation with UNEP*

## **Executive Summary**

Humans depend on the environment and natural resources for their survival. Although environmental factors are rarely, if ever, the sole cause of conflict – ideology, ethnicity, and economic factors are all connected to violent conflict – research shows that **environmental stress and the exploitation of natural resources can increase the severity and duration of conflict, and complicate its resolution**. Attempts to control or gain access to scarce or extractive natural resources can contribute to the outbreak of conflict. If access to the direct use of scarce land, forest, water or wildlife resources leads to marginalization or exclusion of certain groups, they become easy targets for political manipulation. Easily exploited natural resources may also alter the dynamics of conflict and turn a political activity into an economic one. High-value extractive resources can finance military operations and sustain a conflict. The prospect of peace may be undermined by individuals or factions that benefit from conflict conditions as they are in control of revenues from resource exploitation.

As the global population continues to rise and the demand for resources continues to grow, there is a significant potential for conflicts over natural resources to multiply in the coming decades. **Demographic pressure and urbanization, inequitable access to and shortage of land, and resource depletion are widely predicted to worsen in the coming decades**, with profound effects on the stability of both rural and urban settings. Climate change is also increasingly seen as a threat to international security, further exacerbating existing tensions and possibly triggering new conflicts by redrawing the maps of water availability, food security, disease prevalence, coastal boundaries and population distribution.

Where environment and natural resource factors generate conflict, post-conflict peacebuilding efforts must tackle them directly in order to achieve durable peace. At the same time, **the recognition that environmental and natural resources can contribute to violent conflict only underscores their potential significance as a pathway for cooperation and confidence-building in war-torn societies**. High value natural resources can be an asset in the economic recovery if properly managed. Land and water are critical assets, while high-value resources hold out the prospect of economic development, employment and budget revenues. Indeed, not only can failure to respond to the environmental and natural resource needs of a population or to management of valuable resources seriously complicate the task of building sustainable peace, but ignoring the environment as a peacebuilding tool misses a serious opportunity for reconstruction and reconciliation in post-conflict situations.

People's understanding of peace and security has evolved over the last ten years. Security is not only conceived in the narrow terms of military threats by aggressor nations. Refugee flows spill the consequences of intra-state conflict across borders, as do incursions by rebel groups. At the same time, peace is seen to be much more than just the absence of violent conflict. In this context, donors are

more willing to provide incentives for good environment and natural resource management as a key peacebuilding component. For example, as the Kimberley process became the primary tool to deal with conflict diamonds, expectations have grown that other certification mechanisms, such as the Extractive Industries Transparency Initiative, EITI, will prove to be valuable tools to combat the ‘resource curse’.

Through its various configurations and proper leveraging of the Peacebuilding Fund, the Peacebuilding Commission can ensure that environment and natural resource considerations are mainstreamed within its deliberations. In particular, the PBC could promote the need for environmental stress assessments and incorporate the relevant findings into the integrated peacebuilding strategies developed with countries on its agenda. Finally, as research and practice related to the environment, natural resources, and peacebuilding develop further, the PBC should deepen its understanding through future thematic discussion and other knowledge-sharing forums.

## **1 The role of natural resources and the environment in fueling conflict**

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### **1.1. Rationale**

The relationship between natural resources, the environment and conflict is multi-dimensional and complex. By natural resources we mean sources of wealth that occur in a natural state such as timber, water, land, wildlife, minerals, metals, stones, and hydrocarbons. By environment we mean the physical conditions that affect natural resources (climate, geology, hazards) and the ecosystem services that sustain them.

Many countries currently face challenges related to the use of natural resources, and to the allocation of natural wealth. In some cases, these challenges have led to internal, occasionally violent, tensions. Conflicts over natural resources appear to fall into two broad categories:

- i. Conflicts over the fair apportioning of wealth from extractive resources, such as minerals, metals, stones, hydrocarbons and timber, which stem primarily from a failure of national governance; and
- ii. Conflicts over the direct use of land, forestry, water and wildlife resources, which are caused by physical scarcity when local demand for resources exceeds supply. When certain groups are prevented sufficient access, governance and distribution factors can be an additional cause.

Environmental factors are rarely, if ever, the sole cause of conflict – ideology, ethnicity, poor economic conditions, rapid regime change, low levels of international trade, and conflict in neighboring countries are all important factors. However, the exploitation of natural resource and related environmental degradation can be significant drivers of conflict<sup>1</sup>, increasing the severity and duration of violence and complicating its resolution. Three principal pathways connecting environment, natural resources, and conflict include:

- i. **Contributing to the outbreak of conflict:** attempts to control or gain access to scarce or extractive natural resources can contribute to the outbreak of conflict;
- ii. **Financing and sustaining conflict:** Once a conflict has broken out, extractive resources may be exploited to finance arms and armies, or become a strategic consideration in gaining territory. In such cases, the duration of the conflict is extended due to the new sources of financing or in an effort to gain control over a resource rich territory.
- iii. **Spoiling the prospects for peace:** The prospect of peace may be undermined by individuals or factions that will lose access to revenues gained from resource exploitation. In such cases, they may actively undermine peace processes in order to benefit from conflict conditions.

The last twenty years has witnessed seventeen intra-state conflicts fuelled by the trade in natural resources. Resources such as diamonds, timber, minerals and cocoa have been exploited by armed groups in several countries, including Angola, Cambodia, the Democratic Republic of Congo, Liberia and Sierra Leone, thereby contributing to conflict and undermining peace efforts.

Indeed, the existence of easily captured and exploited natural resources not only makes insurgency economically feasible<sup>2</sup> (and, therefore, war more likely); it may also alter the dynamics of conflict itself, as natural resource revenues allow combatants to fight longer and encourage them to orient their activities towards gaining tangible assets like diamond mines. Thus, revenues and riches can alter the mindset of combatants, turning war and insurgency from a purely political activity to an economic one, with conflicts becoming less about grievance and more about greed<sup>3</sup>.

In other cases, local-level conflict over natural resources occurs in stressed or degraded environments, where demand for scarce resources, such as land and water, exceeds available supplies. This is often compounded by demographic pressures and disasters such as drought. Unless local institutions or practices can mitigate these threats, scarcity pressures can result in forced migration or violent conflict. In Darfur, for example, the steady loss of fertile land, coupled with rapidly increasing human and livestock populations, is one of several specific stresses that has driven the region into conflict.

Worldwide, demographic pressure and urbanization, inequitable access to and shortage of land, and resource depletion are widely predicted to worsen in the coming decades, with profound effects on the stability of both rural and urban settings. With 75 million people added to the planet annually, the population of the 50 least-developing countries is expected to more than double by 2050. Already, one out of seven people on the planet live in urban slums, and one out of three live on USD \$2 or less per day.

Finally, climate change is increasingly seen as a threat to international security. Analysts and advocates argue that by redrawing the maps of water availability, food security, disease prevalence, coastal boundaries, population distribution, and climate change could exacerbate existing tensions and trigger new conflicts<sup>4</sup>. The spring 2008 food crisis manifests how the convergence of various global trends dramatically affects the most vulnerable groups, and how this can also lead to instability in various locations around the globe.

## **1.2. Contributing to the outbreak of conflict**

### Case study: Darfur, Sudan

The UN Environment Programme has called desertification “Sudan’s greatest environmental problem.”<sup>5</sup> The steady loss of fertile land is one of several environmental stresses that has driven the social, political and economic systems of Darfur to violent conflict. Indeed, the supply of fertile land is declining, while human and livestock populations are increasing rapidly.<sup>6</sup> As these underlying tensions increase, the weaknesses of institutions governing access to land and water become more apparent, and some groups such as pastoralists have been particularly disadvantaged. Marginalized groups have been recruited as militias to fight proxy wars, where they have been able to raid cattle.

Fertile land has been lost in several ways. Over-grazing and deforestation have reduced the vegetation cover, causing loss of topsoil volume and quality, while the loss of sheltering trees and vegetation has decreased natural defences against shifting sands. Rainfall has also declined: in northern Darfur, sixteen of the twenty driest years on record have occurred since 1972<sup>7</sup>. According to the Intergovernmental Panel on Climate Change, warming surface waters in the Indian Ocean have played a role in reducing rainfall in the Sahel, and loss of vegetation cover has likely fed back into localized climate change, contributing to the reduction of rainfall in the later part of the 20<sup>th</sup> century.

Desertification places added stress on the social and economic systems of Darfur, in which some 75 percent of the population are directly dependent on natural resources for their livelihoods. The burden of lost land has fallen disproportionately on pastoralists. Desertification is one of several underlying causes of the conflict in Darfur. However, institutional weakness and the exploitation of marginalized groups for political and military purposes unrelated to the environment have created the environmental pressures that have, ultimately, resulted in violence.

## **1.3. Financing and sustaining conflict**

### Case study: Angola

In Angola, the civil war between the Government of Angola (dominated by the socialist, former independence movement MPLA) and UNITA (also an anti-colonialist movement) was originally a manifestation of an ideological struggle linked to the Cold War. However, after the Cold War, foreign support for the warring parties began to subside. In 1992, the first multiparty elections in the history of Angola were won by the MPLA government. UNITA rejected the results and resumed armed struggle. This move caused UNITA to lose most of its international support. Without diamonds, UNITA would probably have been unable to sustain its war effort for nearly another decade.

From the early 1980s onwards, UNITA established its operations in the diamond-rich north of the country, and began earning revenue from taxes on production of, and trade in, diamonds. In the period 1992 to 2000, the diamond trade from UNITA-controlled territories was estimated at USD 3-4 billion. In parallel, the war effort of the Angolan Government was to a large extent dependent on oil revenues. It has been suggested that the course of the war broadly followed the price of oil relative to diamonds.

By illustrating how natural resource revenues can make parties far more impervious to outside political pressures, Angola is thus a telling example of some of the dangers posed by natural resource riches in a country embroiled in civil war. However, this case also demonstrates that natural resource revenues do make belligerents vulnerable to outside economic pressures, as UN sanctions on UNITA diamonds pressured the organization from the late 1990s onwards, helping to accelerate its eventual collapse.

#### **1.4. Spoiling the prospects for peace**

##### *Case study: Sierra Leone and Liberia*

In 1991, Liberian warlord Charles Taylor sponsored the invasion of Sierra Leone by the rebel group the Revolutionary United Front (RUF), whose brutal military campaign was characterized by mass amputations and systematic rape.<sup>8</sup> Taylor not only provided material support to the RUF, but also sent his own troops to fight alongside them, both before and after he assumed the Liberian presidency in 1997.<sup>9</sup> Taylor's support of the RUF was motivated, at least in part, by his desire to gain control of lucrative Sierra Leonean diamond fields less than 100 miles from the Liberian border. This desire spoiled the prospects for peace in Sierra Leone until 2001. The Special Court for Sierra Leone would later indict Taylor for participating in a joint criminal enterprise “to take any actions necessary to gain and exercise political power and control over the territory of Sierra Leone, in particular the diamond mining areas.”<sup>10</sup>

In response to the role of the diamond trade in financing the RUF and Charles Taylor, the UN Security Council imposed sanctions on diamond exports from Liberia in March 2001. This increased pressure on the RUF led to its decision to disarm the following year, after a decade of fighting which left over 200,000 people dead, more than two million displaced, and thousands maimed.<sup>11</sup> An unintended side effect of the sanctions, however, was that they prompted Charles Taylor to switch to another natural resource, Liberian timber, as his main source of revenue. Reflecting the lack of coherence in the UN's approach to natural resource-fuelled conflicts, it took another two years before sanctions were imposed, in July 2003, on Liberian timber exports. The following month, with his key funding source cut and rebel groups advancing on Monrovia, Charles Taylor went into exile in Nigeria.

In the years preceding the RUF insurgency, massive mismanagement in Sierra Leone's diamond sector played a significant role in triggering political instability and violence. From 1968 to 1985, President Siaka Stevens, brought Sierra Leone's lucrative diamonds sector under his control, overseeing the diversion of revenues from the state into the pockets of a few individuals.<sup>12</sup> As diamond smuggling operations skyrocketed, official exports of diamonds dropped from more than 2 million carats in 1970 to 48,000 carats in 1988.<sup>13</sup> This looting of the state marginalized large sections of the population, undermined the government's legitimacy and weakened its capacity to maintain peace and stability.

## 2 The role of natural resources and environment in buttressing peacebuilding

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### 2.1. Rationale

The previous section demonstrated that natural resources are an important factor in contributing to the outbreak and continuation of conflict, as well as in spoiling prospects for peace. Increasing population pressures and environmental stress, including climate change, will likely only compound these problems. For peacebuilding to succeed, it is therefore critical that these conflict drivers are managed, tensions defused, and natural assets used in a sustainable manner to support stability and development in the long-term. Indeed, a durable peace is unattainable if the natural resources that sustain livelihoods and ecosystem services are damaged, degraded or destroyed.

To date, the UN has not effectively integrated environment and natural resource considerations into peacebuilding. Priorities usually rest with meeting humanitarian needs, demobilization, disarmament and reintegration, supporting elections, restoring order and the rule of law, and opening the economy to attract foreign investment. The environment and natural resources are often framed as important issues to address at a later stage. This is a flawed approach, which fails to take into account the changing nature of security threats to national (and often-times regional) stability as demonstrated by the cases cited above. Integrating environment and natural resources into peacebuilding is no longer an option - it is a security and development imperative.

This new understanding is reflected in recent high-level policy debates and statements. In June 2007, an historic debate at the UN Security Council concluded that poor management of high-value resources constitutes a threat to peace. Promising statements have to be translated into action. The following section provides some compelling reasons and supporting case studies on how environment and natural resources can contribute to peacebuilding.

- **Supporting economic recovery:** Through proper management in a diversified economy, "high-value" resources (such as hydrocarbons, minerals, metals, stones and export timber) hold out the prospect of positive economic development, employment and budget revenues. However, the pressure to kick-start development and earn foreign exchange can lead to the rapid uncontrolled exploitation of such resources at sub-optimal prices, without due attention to sustainability imperatives.
- **Supporting humanitarian needs and coping strategies:** Natural resources are critical assets in humanitarian operations, providing land, water, construction materials, and renewable energy. They also support coping strategies and basic survival in the absence of sustainable livelihoods. A "do no harm" approach to environment and natural resources is therefore critical to secure and sustain humanitarian programming and prevent conflict with host communities.
- **Developing sustainable livelihoods:** Durable peace fundamentally depends on the development of sustainable livelihoods and on the recovery and sound management of the natural resource base. Environmental damage caused by conflicts, coping strategies, and chronic environmental problems that undermine livelihoods must, therefore, be addressed from the outset. Minimizing vulnerability to natural hazards and climate change through the management of key natural resources should also be a priority. The ability of the environment and resource base to support rural livelihoods, urban populations and economic recovery is a

determining factor for lasting peace. The transparent, equitable, and legitimate definition and realization of property rights and land and resource tenure can have profound positive impacts on a country's environmental, social, and economic prospects, helping to prevent conflict and promote peace. Conversely, the lack of these rights-or the incorrect sequencing of interventions-has resulted in poor outcomes across the development spectrum

- **Contributing to dialogue, cooperation and confidence-building:** Mutual need and interest to use, share or protect natural resources can be harnessed as a means to build trust, confidence and cooperation between groups, as well as within and between states (e.g. common property resources such as fisheries or forests, transboundary protected areas, and shared river basins).

## 2.2. Supporting economic recovery

### *Case study: Liberia*

The role of timber revenues in bankrolling the Charles Taylor regime and spoiling peace prospects in Liberia is well studied. Groundbreaking reports by Global Witness and the United Nations expert panels resulted in UN-imposed sanctions on Liberia's timber trade in 2003. Since the signing of the Comprehensive Peace Agreement in 2003, reform of the forestry and mining sectors has been a key peacebuilding and economic priority. In addition, the UN peacekeeping mission in Liberia (UNMIL) was the first such mission to institute an "environmental and natural resources unit" with a specific mandate to provide technical assistance on natural resources management, in particular forests and minerals.

At the end of the conflict, the prospects for the forest sector to contribute to economic recovery were strong. From 2000 to 2002, forestry represented the country's most important economic activity, responsible for 50-60 percent of the nation's foreign exchange. It accounted for approximately 26 % of GDP in 2002. In March 2003, the IMF stated that near-term growth prospects of the economy would rely primarily on timber products from regions unaffected by conflict. However, it warned that without effective control mechanisms, the viability and long-term sustainability of the forests would be endangered. UNEP's environmental study on Liberia also highlighted the need for environmental safeguards as Liberia accounts for the largest remaining remnant (42 percent) of the Upper Guinea forest of West Africa.

## 2.2 Supporting humanitarian needs and coping strategies

### *Case study: Darfur*

As a consequence of the conflict in Darfur, around one third of the region's population has been displaced. The displaced often seek refuge in or close to cities, or in large camps. This has caused a dramatic increase of population in the internally displaced persons (IDPs) receiving areas, compounding pressures on water, wood and land resources. Groundwater resources, for example, appear to be under severe stress. Of the 66 boreholes drilled in Abu Shouk and Al Salaam camps, 12 to 15 boreholes have already run dry. It has also been observed that where IDPs have settled on the outskirts of towns, farmland and sheltering tree belts have been damaged or removed entirely.

As problems of desertification and resource sharing have contributed to conflict in the region, it is essential that humanitarian and early recovery activities are designed to limit or eliminate adverse effects on the environment. If planned and managed badly, urgent life-saving operations could end up exacerbating conflict in the longer term, and undermining livelihoods in host communities.

### **2.3 Developing sustainable livelihoods**

#### *Case Study: Haiti*

The UN currently has a force of 7,000 peacekeeping troops and almost 1,000 police officers stationed in Haiti, with a mandate to ‘stabilize’ the country. Many factors, including the colonial legacy, leadership profiles, economic issues, and politics, inform Haiti’s plight, but the extreme environmental problems facing the island state are among the largest and most obvious obstacles to progress.

Between 1990 and 2000, Haiti lost 43 percent of its total forest cover. When forests disappear, so does the natural shield that they form against the impacts of tropical storms in mountainous terrain. Rain then removes the topsoil as it is torrenting down the mountainside, depositing it in rivers, lakes and in bays, where it affects fisheries. Conversely, farmers are left with much less fertile soil to raise crops. When storms are particularly severe, such as the hurricane Jeanne in 2004, mudslides and floods cost many lives. Hurricane Jeanne left 3,000 dead in Haiti.

Reforestation, investments in alternative energy sources, and sustainable agricultural and forestry practices are necessary elements for environmental rehabilitation in Haiti. While it is certain that rehabilitating the environment will not alone solve Haiti’s problems of governance, development and human needs, it is also clear that it will be very difficult to obtain stability and development without it.

### **2.4 Environmental cooperation and confidence-building**

#### *Case Study: Afghanistan and Iran*

The transboundary Sistan basin wetlands (also known as the Hamouns) is a closed inland delta nourished mainly by the Helmand River. It is located in an arid and rugged part of Baluchistan, near the juncture of the Afghanistan, Iran and Pakistan borders. Over the past decade (1995-2006) drought has been more frequent in the Sistan basin, and between 2001 and early 2005, the Sistan wetlands lay completely dry.. As agriculture and fisheries failed, people lost their livelihoods, resulting in large-scale population displacement, including migration of Afghan refugees into Iran.

Given the importance of the wetland for livelihoods on both sides of the border, restoring and managing the natural resource is a common platform for technical dialogue and confidence-building between the two countries. UNEP has facilitated “Environmental Diplomacy” between Afghanistan and Iran by organizing technical meetings and providing an objective analysis of the situation based on time series satellite images. The meetings involved senior inter-ministerial delegations that included representatives from key government agencies (foreign affairs, environment, water, agriculture and local government). As an immediate measure, the two countries have committed to establish national

advisory committees, to develop a joint Global Environment Facility project for the restoration of the wetlands and to share information on water quantity.

### **3. Current trends, policy innovations**

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Over the past decade, two fundamental changes have occurred in the way the international community understands peace and security. First, the concept of security is no longer narrowly conceived in terms of military threats from aggressor nations. In today's world, state failure and civil war in developing countries represent some of the greatest risks to global peace and security. War-torn countries have become havens and recruiting grounds for international terrorist networks, organized crime, and drug traffickers. Tens of millions of refugees have spilled across borders creating new tensions in host communities. Instability has also rippled outward as a consequence of cross-border incursions by rebel groups, causing disruptions in trade, tourism and international investment.

The second major change lies in a new understanding of the causes of violent conflict. The 2004 report of *The UN High-Level Panel on Threats, Challenges and Change* highlighted the fundamental relationship between the environment, security, and social and economic development in the pursuit of global peace in the 21st century. While political and military issues are critically important, economic and social threats, including poverty, infectious diseases and environmental degradation are now also seen as significant contributing factors. The potential for conflicts to be caused by the environmental effects of climate change is also increasing international interest in this topic. As a result, no serious discussion of current or emerging threats to security can take place without considering the role of natural resources and the environment.

This new conceptual understanding is accompanied by an expanding fieldwork addressing environmental causes and consequences of lethal conflicts. UN actors, such as UNEP<sup>14</sup>, FAO<sup>15</sup> or UN-HABITAT,<sup>16</sup> have developed environment and natural resource management practices for post-conflict settings. NGOs, such as Global Witness<sup>17</sup>, have advocated a greater focus on natural resource issues on the political agenda. Major donors have supported an increasing volume of work in the area of environment and conflict.

Trade sanctions are a traditional international oversight mechanism for minimising the scope of natural resources financing conflict. But certification mechanisms are also being put together to influence natural resource trade patterns in conflict areas. Perhaps the most famous such example is the Kimberley Process Certification Scheme. Having been endorsed by UN General Assembly and UN Security Council, the Kimberly Process has been the main tool to deal with "conflict diamonds". The scheme is an agreement between diamond producing and consuming countries, on the one hand, and the diamond industry, on the other, to certify the origins of diamonds. Multi-stakeholder engagement in this transparency regime has contributed to one of the few functioning arrangements in the natural resource sector. Another initiative aimed at preventing the 'resource curse' is the Extractive Industries Transparency Initiative (EITI). It is a voluntary mechanism that includes private companies and

governments, as well as civil society organisations. EITI sets a global standard for the companies to make their payments transparent and governments to report on their revenue.

Foreign direct investment is needed in post-conflict societies, and there is an eagerness to seize the first opportunities for outside investment. There might often be contracts inherited from the previous regimes that tie the hands of transitional authorities unless renegotiated. On top of the forest law reform mentioned previously, in Liberia, President Ellen Johnson-Sirleaf was able to renegotiate an iron ore mining contract with Mittal Steel in a way that the steel company would set iron prices at the international markets rate, rather than by Mittal itself. International awareness-raising by Global Witness and mobilising technical expertise were both instrumental in reaching this positive outcome.

Promoting the good management of both natural resource scarcities and local abundances at the source go beyond the commercial sphere. To prevent a relapse into violence in post-conflict settings, peaceful dispute resolution and arbitration mechanisms need to be in place for solving contentious issues. Human capacities, institutions, policies and norms need to be established and enhanced in order to provide a systematic way to address conflicts of interests that do arise. Where vested interests by powerful groups risk to interfere with good natural resource management, international peacebuilding efforts are needed to reinforce good governance. Internationally assisted projects provide incentives and can set conditions for improving governance transparency. Issues where further international assistance may be necessary include, for example:

- Reliable information on the key environmental and natural resource assets is not always available in a traumatised post-conflict situation. To ensure that different stakeholders agree on the baseline data, the help of an external, neutral authority in conducting a comprehensive environmental stress assessment is often necessary.
- The concerned stakeholders need to be able to share reliable information on conditions and trends as a guarantee against fraud; transparency of this nature enables effective monitoring by civil society, diminishing uncertainties while increasing legitimacy.
- Setting up new management and accountability mechanisms also signals the end of impunity and the start of a new phase, based on fairness and openness, in a post-conflict setting.

The PBC is uniquely situated to play a pivotal role in mainstreaming environmental considerations into its peacebuilding work. With its diverse membership from the global South and North, it has the potential to serve as a formidable global forum for connecting different actors and discuss innovative peacebuilding approaches that can be adapted in other national and regional contexts. In this regard,, the PBC might wish to consider:

- Systematically integrating environmental and natural resource management issues into its deliberations, whether in its Country-Specific Meetings, through Strategy and Policy Dialogues in the Organizational Committee, or in other *ad hoc* fora.
- Leveraging the Peacebuilding Fund and other resource mobilization tools to advance pro-active programming related to the environment, natural resources, and peacebuilding.

- Promoting assessments on environmental stress factors when mapping the peacebuilding needs of a PBC country and incorporating relevant analytical findings within an integrated peacebuilding strategy.
- Further deepening the understanding of the environment, conflict, and peacebuilding nexus in future PBC Working Group on Lessons Learned meetings and other knowledge-sharing activities within the wide UN peacebuilding community.

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## Resources and References

### UNEP:

Post-Conflict and Disaster Management Branch publications

<http://postconflict.unep.ch/publications.php?prog=none>

*Understanding Environment, Conflict and Cooperation:*

<http://www.unep.org/PDF/ECC.pdf>

### FAO

Natural resource conflict management case studies

<http://www.fao.org/docrep/005/y4503e/y4503e00.htm>

Land tenure:

<http://www.fao.org/docrep/008/j5415e/j5415e00.htm>

**UN-HABITAT:** Post- Conflict Land Administration and Peacebuilding

<http://www.unhabitat.org/pmss/getPage.asp?page=bookView&book=2443>

**UNHCR:** Environmental Guidelines

<http://www.unhcr.org/cgi-bin/txis/vtx/protect/opendoc.pdf?tbl=PROTECTION&id=3b03b2a04>

**UNDP:** Human Development Reports

*Fighting Climate Change: Human Solidarity in a Divided World*

*Beyond Scarcity: Power, Poverty, and the Global Water Crisis*

<http://hdr.undp.org/en/reports/>

**Swisspeace, Centre for Security Studies**

*Linking Environment and Conflict Prevention – The Role of the United Nations. (Forthcoming)*

**Environmental Change and Security Program (ECSP), Woodrow Wilson Center**

[http://wilsoncenter.org/index.cfm?topic\\_id=1413&fuseaction=topics.categoryview&categoryid=A82C CAEE-65BF-E7DC-46B3B37D0A3A575F](http://wilsoncenter.org/index.cfm?topic_id=1413&fuseaction=topics.categoryview&categoryid=A82C CAEE-65BF-E7DC-46B3B37D0A3A575F)

-Conflict and Cooperation: Making the Case for Environmental Pathways to Peacebuilding in the Great Lakes Region Author: *Patricia Kameri-Mbote* , <http://wilsoncenter.org/topics/docs/Patricia.pdf>

**Adelphi Research** on environmental peacebuilding:

[http://www.adelphi-research.de/ECC/PDF/Carius\\_Environmental\\_Peacemaking\\_06-07-02.pdf](http://www.adelphi-research.de/ECC/PDF/Carius_Environmental_Peacemaking_06-07-02.pdf)

**German Advisory Council on Global Change:**

World in Transition: Climate change as a Security Risk

[http://www.wbgu.de/wbgu\\_jg2007\\_engl.pdf](http://www.wbgu.de/wbgu_jg2007_engl.pdf)

**IISD and IUCN**

Conflict sensitive trade policy: [http://www.iisd.org/pdf/2005/tas\\_objectives.pdf](http://www.iisd.org/pdf/2005/tas_objectives.pdf)

Conserving the peace: Resources, Livelihoods and Security:

<http://www.iisd.org/publications/pub.aspx?id=477>

**WorldWatch Institute**

Beyond Disasters: Creating Opportunities for Peace by Michael Renner and Zoe Chafe

<http://www.worldwatch.org/node/5111>

**OECD issue briefs**

Overview on environment, conflict and peace: <http://www.oecd.org/dataoecd/26/49/35785489.pdf>

Land and conflict: <http://www.oecd.org/dataoecd/26/50/35785480.pdf>

Forests: <http://www.oecd.org/dataoecd/26/47/35785528.pdf>

Water: <http://www.oecd.org/dataoecd/26/5/35785565.pdf>

Valuable minerals: <http://www.oecd.org/dataoecd/26/46/35785546.pdf>

**USAID**

On minerals:

[http://www.usaid.gov/our\\_work/cross-cutting\\_programs/conflict/publications/docs/CMM\\_Minerals\\_and\\_Conflict\\_2004.pdf](http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_Minerals_and_Conflict_2004.pdf)

Land and conflict:

[http://www.usaid.gov/our\\_work/cross-cutting\\_programs/conflict/publications/docs/CMM\\_Land\\_and\\_Conflict\\_Toolkit\\_April\\_2005.pdf](http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_Land_and_Conflict_Toolkit_April_2005.pdf)

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[http://www.landcoalition.org/pdf/06\\_pub\\_nsi\\_book\\_full.pdf](http://www.landcoalition.org/pdf/06_pub_nsi_book_full.pdf)

**DFID**, [Management and protection of environment in humanitarian crises](#)

## Scholarly Articles

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<sup>1</sup> Conflicts are an unavoidable part of processes of social change in all societies. This paper deals with violent conflict but, from here on, uses "conflict" as shorthand for it.

<sup>2</sup> Paul Collier, 'Economic Causes of Civil Conflict and their Implications for Policy', 15 June 2000, <http://www.worldbank.org/research/conflict/papers/civilconflict.pdf>

<sup>3</sup> Karen Ballentine and Jake Sherman (eds.), 'The Political Economy of Armed Conflict: Beyond Greed and Grievance', 2003.

<sup>4</sup> German Advisory Council on Global Change (WBGU), 'Climate Change as a Security Risk', 2008, [http://www.wbgu.de/wbgu\\_jg2007\\_engl.pdf](http://www.wbgu.de/wbgu_jg2007_engl.pdf)

<sup>5</sup> UNEP, Sudan Post-Conflict Environmental Assessment, 2007.

<sup>6</sup> Darfur's population has grown six-fold since the 1950s

<sup>7</sup> Tearfund, Relief in a vulnerable environment, 2007

<sup>8</sup> Integrated Regional Affairs Network, September 2004, 'Our Bodies – Their Battleground: Gender-based Violence in Conflict Zones', IRIN web special.

<sup>9</sup> Report of the UN Panel of Experts on Sierra Leone, December 2000. S/2000/1195.

<sup>10</sup> Charles Taylor indictment; the indictment, dated March 2003, was amended on March 16<sup>th</sup> 2006 from 17 counts to 11 counts. Available at <http://www.sc-sl.org/Taylor.html>.

<sup>11</sup> Global Witness "Sinews of War", November 2006; United Nations Peacebuilding Commission, "Conference Room Paper for the Country Specific Meeting on Sierra Leone" 10 October 2006. PBC/2/SIL/CRP.1 Paragraph 4-5.

<sup>12</sup> William Reno, Warlord Politics and African States, Lynne Rienner, 1998, p.116

<sup>13</sup> Ian Smillie, Lansana Gberie & Ralph Hazleton. The Heart of the Matter: Sierra Leone, Diamonds and Human Security, Partnership Africa Canada, 2000, section 4.3.

<sup>14</sup> <http://postconflict.unep.ch/>

<sup>15</sup> <http://www.fao.org/docrep/008/j5415e/j5415e00.htm>

<sup>16</sup> <http://www.unhabitat.org/list.asp?typeid=13&catid=404>. Also UNDP's Bureau for Crisis Prevention and Recovery focuses on conflict prevention and early recovery. BCPR activities have included "Diamonds for Development" in Liberia and oil revenue management in Sao Tome.

<sup>17</sup> <http://www.globalwitness.org/>