MEAs, Conservation and Conflict

A case study of Virunga National Park, DRC

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Corresponding author: Alec Crawford, International Institute for Sustainable Development (IISD), International Environment House 2, 9 chemin de Balexert, Châtelaine, 1219, Geneva, Switzerland. Phone: 0041 22 917 8684, fax: 0041 22 917 8054, e-mail: acrawford@iisd.org.

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International Institute for Sustainable Development
161 Portage Avenue East, 6th Floor
Winnipeg, Manitoba
Canada R3B 0Y4
Tel: +1 (204) 958–7700
Fax: +1 (204) 958–7710
E-mail: info@iisd.ca
Web site: http://www.iisd.org/
Executive Summary

Virunga National Park (Parc National des Virunga, PNVi), in the eastern part of the Democratic Republic of Congo (DRC), is Africa’s oldest and most diverse park. Stretching along the Congolese border with Uganda and Rwanda, PNVi has more bird, mammal and reptile species than any other on the continent. But for the past two decades, the park and the surrounding area in North Kivu province have experienced near-constant violent conflict. For the local population, the result has been widespread suffering: death, rape, displacement, sickness and starvation. Between August 1998 and April 2007, more people died from this conflict than from any war since the Second World War. Most of the casualties were civilians, and almost half children.

Beyond the humanitarian crisis, conflict has threatened the species, habitats and communities that depend on PNVi for their survival. The park is in crisis: its governance systems have collapsed; its boundaries are encroached upon by the surrounding local and refugee populations; its habitats are being destroyed by overfishing and charcoal production; and its animals are killed for meat and ivory.

Conflict has also significantly contributed to the fact that the UN’s environmental conventions are not able to achieve their stated objectives in the park. Multilateral environmental agreements (MEAs), designed to protect such globally-significant ecosystems, have thus far been unable to address the threats to the park. Despite the proliferation of relevant environmental conventions and the DRC’s participation in them, environmental destruction continues in PNVi.

Using PNVi and the Great Lakes conflicts as a case study, this paper analyzes where entry points exist for policy-makers and conservationists to use five existing international environmental agreements to better protect biodiversity and ecosystems in times of conflict: UNESCO WHC, CBD, CMS, CITES and Ramsar. While not an exhaustive study, the paper identifies some of the shortcomings of existing agreements, where entry points might exist and what other international policy instruments and fora could be used to help protect important ecosystems like PNVi.

The UN MEAs are not designed or expected to offer practical solutions to conservation crises on the ground; it is up to the national governments of the signatory states, and their conservation authority, to enforce and achieve Convention goals. Their sovereignty must be respected by the other parties. However the MEAs, their COPs and their Secretariats can help them do so by building capacity, improving information gathering (i.e., the IPCC model) and supporting underfunded budgets. This analysis reveals a number of specific opportunities for elevating environment-conflict issues to international policy levels to help save important ecosystems in times of conflict.
First, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) World Heritage Convention (WHC) directly addresses the conservation challenges faced by countries in or emerging from conflict. Inclusion on the World Heritage List has proven critical in focusing international attention on ecosystems of global significance and entitles the State Party concerned to a wide range of support from UNESCO to help protect and monitor the site. Placing a site on the List of World Heritage in Danger is usually the first recourse in trying to protect it from conflict; it focuses widespread international attention on an ecosystem of global significance (and responsibility) whose survival is threatened by conflict, and hopefully mobilizes action. Moreover, it allows parties to access the World Heritage Fund. Although the Fund has proven inadequate to meeting full resource needs, the DRC, as a Party to the Convention, can resort to the Convention’s governing body, the General Assembly of State Parties to the World Heritage Convention, to make the case for increased financial support.

Second, with regards to the Convention on Biological Diversity (CBD), field consultations indicate that the CBD is not seen as a particularly strong tool for the promotion of transboundary cooperation. But improved action on transboundary natural resource management in the region, supported by the Convention, could help park authorities on all sides of the border deal with some of the impacts of conflict on the various components of the shared ecosystem (fisheries, species, charcoal movements, etc.). There are a number of important entry points and resources under the auspices of the CBD through and with which the DRC can raise the challenges conflict poses to park conservation. These relate to the ongoing work by the UNEP World Conservation Monitoring Centre and the CBD Secretariat and Contracting Parties to develop and test mechanisms for assessing CBD implementation challenges. In addition, the DRC would be eligible for GEF support for CBD implementation activities. As well, the DRC could benefit from ongoing efforts undertaken by the World Heritage Centre and the CBD Secretariat to support implementation of the CBD’s Programme of Work on Protected Areas (CBD PoWPA) in natural World Heritage Sites.

Third, the Convention on the Conservation of Migratory Species has proven to be an important catalyst for deepening transboundary cooperation among the DRC, Rwanda and Uganda. Key lessons include the importance of forging agreements at the level closest to the environment-conflict challenge in question and the need for robust cooperative mechanisms to address conservation challenges (such as the conservation of the mountain gorilla) that no one range state could address alone.

Fourth, the DRC’s implementation experience with CITES reveals less of a success story. On the ground, anti-poaching enforcement has collapsed and this has been exacerbated by significant increases in corruption after two decades of conflict. Once again this is an example of the very context-specific challenges that states in post-conflict recovery must face in MEA implementation.
Nevertheless, like the Convention on the Conservation of Migratory Species, CITES provides important opportunities for the DRC to deepen its environmental cooperation with neighbouring states.

Fifth, the Wetlands Protection Convention could provide much-needed resources for the DRC in the protection of its Ramsar sites. And like the WHC and CITES, Ramsar could be an important catalyst for strengthening transboundary cooperation in order to mitigate the environmental impacts of conflict in the region, specifically relating to the Lake Edward ecosystem. In addition, the Convention and its Secretariat could be used to promote sustainable fishing on the lake.

Equally important alongside the MEA-specific entry points are other international and African policy instruments and forums, which provide immediate opportunities for the DRC to raise environmental conflict concerns:

First, the DRC should engage the recently established UN Peacebuilding Commission (PBC) to assist in integrating environmental concerns and challenges into its post-conflict recovery and reconstruction. The PBC could play a catalytic role in bringing all the relevant actors, i.e. local, national, regional and international civil society organizations, together with international donors, international financial institutions and troop contributing countries, in order to address how best to integrate environmental conflict concerns into the larger challenge of disarmament, demobilization, repatriation, resettlement and reintegration processes.

Second, the DRC could use the Millennium Development Goals (MDGs), especially the Annual Ministerial Review (under the auspices of ECOSOC) to highlight how a lack of access to safe energy is undermining its ability to meet all of the relevant MDGs. There is no specific energy target under any of the MDGs and the DRC could explore promoting an energy-for-cooking target that would help to improve the affordability, availability and safety of cooking fuels and practices.

Third, the increasing receptivity of the UN Security Council to considering environmental security threats is another political track that is ripe with opportunities for the DRC. Building on the 2007 special debate on climate security, the DRC could explore the possibility of mobilizing support for an African Union resolution to call for a second debate on environment and security within the Security Council. The debate could focus on the two-way relationship between the environment and conflict (environment as it affects and is affected by conflict), framed by the current humanitarian crisis in the eastern DRC.

One of the most promising tracks within which the DRC could elevate environmental concerns is through UNEP’s Post Conflict and Disaster Management Branch (PCDMB). In 2007, a UNEP mission to the DRC concluded that, while the situation in the PNVi remains very difficult, carrying
out a post-conflict environmental assessment in the DRC should be a top priority for UNEP.

At the African level, there are many political tracks through which DRC environmental conflict concerns can be raised. The most promising is through the African Ministerial Conference on the Environment (AMCEN), which is the highest regional policy-making body on the environment in Africa. Since a particular focus of AMCEN is directed to the implementation of multilateral environmental agreements (MEAs), this is indeed the most pertinent forum in which the DRC can raise the implementation challenges that are specific to post-conflict states.
### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>AFDL</td>
<td>Alliance des Forces Démocratiques pour la Libération du Congo-Zaïre</td>
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<tr>
<td>ANP</td>
<td>Albert National Park</td>
</tr>
<tr>
<td>CNDP</td>
<td>Congrès National pour la Défense du Peuple</td>
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<tr>
<td>COP</td>
<td>Conference of the Parties</td>
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<tr>
<td>DAC</td>
<td>Development Assistance Committee (OECD)</td>
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<tr>
<td>DiD</td>
<td>Department for International Development (UK)</td>
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<tr>
<td>DRC</td>
<td>Democratic Republic of Congo</td>
</tr>
<tr>
<td>ECOSOC</td>
<td>Economic and Social Council (UN)</td>
</tr>
<tr>
<td>FARDRC</td>
<td>Forces Armées de la République Démocratique du Congo</td>
</tr>
<tr>
<td>FDLR</td>
<td>Forces Démocratique de la Libération du Rwanda</td>
</tr>
<tr>
<td>ICCN</td>
<td>Institut Congolais pour la Conservation de la Nature</td>
</tr>
<tr>
<td>IRC</td>
<td>International Rescue Committee</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MEA</td>
<td>Multilateral Environmental Agreement</td>
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<tr>
<td>MLC</td>
<td>Mouvement de Libération du Congo</td>
</tr>
<tr>
<td>MONUC</td>
<td>United Nations Mission in the Democratic Republic of Congo</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for Africa’s Development</td>
</tr>
<tr>
<td>OCHA</td>
<td>UN Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OSCE</td>
<td>Organization for Security and Co-operation in Europe</td>
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<tr>
<td>PBC</td>
<td>Peacebuilding Commission</td>
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<td>PCRP</td>
<td>Post Conflict and Reconstruction Policy (AU)</td>
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<tr>
<td>PNV</td>
<td>Parc National des Volcans</td>
</tr>
<tr>
<td>PNVi</td>
<td>Parc National des Virunga (Virunga National Park)</td>
</tr>
<tr>
<td>RCD</td>
<td>Rassemblement Congolais pour la Démocratie</td>
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<tr>
<td>RPF</td>
<td>Rwandan Patriotic Front</td>
</tr>
<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<tr>
<td>UWA</td>
<td>Uganda Wildlife Authority</td>
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<tr>
<td>WHC</td>
<td>World Heritage Convention (UNESCO)</td>
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<td>WHS</td>
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1. Introduction

The fishing village of Vitshumbi lies on the southern shore of Lake Edward in the Democratic Republic of Congo (DRC), about 25 km west of the Ugandan border and 200 or so south of the Equator. Economic life in the village revolves around the local fishery, and both the fishery and the village fall within the boundaries of Africa’s oldest park, Virunga National Park (Parc National des Virunga, PNVi). Vitshumbi pre-dates the park, having been settled before its creation in 1925, when PNVi was first established as Albert National Park by the country’s colonial administrators.

More recently, the people of Vitshumbi have experienced a number of turbulent changes. Over the past 20 years, violent conflicts, both local and regional, have engulfed the area, and rebel groups, park guards and armed forces often fight for control of the surrounding territory. The village itself has grown dramatically, as more and more fishers and their families arrive in town to vie for an increasingly small slice of the fishery pie. Public services have all but dried up, with most coming not from the state but from humanitarian organizations working in the area. The formal economy is stagnant. Poaching has increased.

In late December 2006, a fleet of four motorized pirogues arrived in Vitshumbi, each carrying 20 men armed with AK-47s. The rebels had not come to intimidate the villagers, but were there to target the lake’s hippo population.\(^1\) Conflict had erased most of the Congolese wildlife authority’s control in this part of the park; according to newspaper reports, by nightfall, with no protection, 74 of the animals had been dragged out of the water and hacked into large pieces, their meat and ivory quickly shipped off to markets. While in the 1970s tens of thousands of hippos had maintained the ecological balance of the lake, by late 2006 only a few hundred remained.\(^2\)

Seven months later, on July 22, 2007, rangers working in the park’s Southern Sector heard gunshots as night fell. The next day, patrolling the sector by foot, they came across the executed bodies of three members of the Rugendo family, a habituated, well-known group of endangered mountain gorillas. More bodies would be found in the next few days, and by the end of the summer, 10 gorillas in all were dead, none killed by poachers.\(^3\) Only 720 of the animals remain in the world, so the loss was significant. Eventually the murders would be tied to the perpetrators of the region’s lucrative but illegal charcoal trade, a warning to those conservationists trying to break up that trade and protect the park resources and habitats it was destroying. Rebels, soldiers and corrupt members of the Institut Congolais pour la Conservation de la Nature (ICCN) would be implicated, though none have yet been held accountable.

\(^1\) Rice, X (2006) “Elite rangers take on rebels to end the slaughter of Congo’s hippos”, *The Guardian*, December 22, 2006
\(^2\) ibid.
These two recent examples underscore the threats conflict poses to conservation in Virunga National Park. Stretching along the Congolese border with Uganda and Rwanda, it is Africa’s most biodiverse park, with more bird, mammal and reptile species than any other on the continent. It is home to the critically endangered mountain gorilla, once hosted the world’s largest hippo population and recently witnessed the first sighting of an okapi in the wild in 50 years.

But two decades of near-constant conflict have placed this unique ecosystem at risk. Park-based natural resources have been used by belligerents to finance conflict. Hundreds of thousands of refugees, displaced by war, have relied on the extraction of park-based resources for their livelihoods. Insecurity has kept tourists away and in doing so has significantly reduced park receipts and conservation budgets. Conservation has fallen down the list of international priorities as resources are diverted into the ongoing humanitarian crisis. And 120 park rangers—a sixth of the total patrolling the park—have been killed while on duty.

Park management officially falls under the remit of ICCN, the Congolese wildlife authority. But years of conflict and corruption have severely affected the capacity of ICCN to protect PNVi. The park’s continued existence now depends on the dedicated efforts of its under-resourced staff, its under-equipped rangers and a handful of international conservation organizations working in the region; its survival to date is a testament to their hard work.4

The protection of unique ecosystems like PNVi was one of the driving forces behind the creation of many of the UN’s multilateral environmental agreements. The Convention on Biological Diversity (CBD) was signed in 1992 to conserve biological diversity and ensure the sustainable use of its components. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973) was designed to ensure that the international trade of specimens of wild animals does not threaten their survival (such as the ivory derived from PNVi’s hippos). UNESCO’s World Heritage Convention (1972) sets out to protect the world’s natural and cultural heritage; PNVi was inscribed on their list in 1979. And the Convention on Migratory Species (CMS, 1979) recognizes the need to protect migratory species like the mountain gorilla, along with their habitat.

There are other relevant environmental conventions (Ramsar, the UN Convention to Combat Desertification, etc.), and the DRC is a signatory to most of them. Most were written and binding by the time of Rio Earth Summit in 1992; as such, they had been drafted and were being enforced before policy-makers and researchers began to consider the environmental impacts and drivers of conflict, thinking which emerged in the early- to mid-1990s.

A survey of the conventions shows that few are equipped to deal with environmental protection in times of conflict, although some ad hoc tools and mechanisms do exist. Full protection and on-the-

ground conservation are of course outside of the mandates of the Conventions and their Secretariats; national sovereignty has to be respected. But more can be done in times of conflict, using these international policy instruments, to protect the globally significant biodiversity hotspots they were created to save—to protect Lake Edward’s fishery, its hippo population and PNVi’s critically endangered mountain gorillas.

Using PNVi and the Great Lakes conflicts as a case study, this paper analyzes where entry points exist for policy-makers and conservationists to use existing international environmental agreements to better protect biodiversity and ecosystems in times of conflict. While not an exhaustive study, the paper will identify some of the shortcomings of existing agreements, where entry points might exist and what other international policy instruments and fora could be used to help protect important ecosystems like PNVi.

2. **The conflict context**

Conflict has defined much of the history of the Great Lakes region of East Africa over the past two decades. Conflicts have been both local/national and regional, latent and violent, with those at the local level often fuelling and being fuelled by regional conflicts. For the local population, the result has been widespread suffering: death, rape, displacement, sickness and starvation.

The causes of conflict in the region are numerous and complex: the legacies of colonialism; the polarization of identities and ethnicized political violence, particularly between Hutus and Tutsis; disputes over citizenship; chronic poverty and underdevelopment; regime survival; poorly defined, conflicting and weakly enforced resource rights regimes; and the predatory exploitation of natural resources. This section provides a broad overview of the key events and actors in what are very complex regional conflicts among the Great Lakes countries.

In October 1990, the Rwandan Patriotic Front (RPF), a Tutsi-dominated militia based out of Uganda, launched its first attacks on the Hutu government that ruled Rwanda. Fighting continued between the RPF and the Rwandan army until the April 1994 assassination of Rwandan President Juvénal Habyarimana, his plane shot down near Kigali Airport. While the perpetrators remain unknown, the assassination was used by Hutu extremists to trigger ethnic violence against Tutsis, and set off the 100-day Rwandan genocide that claimed the lives to up to one million Tutsis and moderate Hutus.

When the RPF ended the genocide by taking control of Kigali in July 1994, over two million Rwandans—among them génocidaires (members of the Interahamwe and Hutu Power

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organizations), members of the defeated army and Hutu civilians—fled to neighbouring Burundi, Tanzania, DRC and Uganda. Half of these refugees made their way across the Virunga massif to DRC, settling in poorly governed camps established on the edge of Virunga National Park. Amid the anarchy of the camps, the Hutu génocidaires eventually re-organized themselves politically and militarily, and used the camps as bases from which to launch attacks on Tutsi-controlled Rwanda, as well as attacks on Congolese Tutsis.

The failure of Congolese President Mobutu Seso Seko to respond to these attacks (or latent support of them) served as a pretence for three neighbouring countries to respond by joining forces to invade and oust the Congolese leader; the Rwanda government wanted to eliminate those responsible for the genocide, while Uganda and Angola simply wanted rid of the Congolese President, as he had supported similar rebel groups threatening their borders and security. In October 1996, Rwanda and Uganda launched a military campaign against Mobutu, supporting an armed coalition led by Laurent-Désiré Kabila known as the Alliance des Forces Démocratiques pour la Libération du Congo-Zaïre (AFDL). As the AFDL advanced from South Kivu province towards the capital, Kinshasa, to oust Mobutu, they met with little resistance from the refugee camps and from deserting soldiers, and eight months later, entered the capital. By that time, Mobutu had fled, and on May 17, 1997 Kabila declared himself president of the newly-renamed country, the Democratic Republic of Congo. This marked the end of what is referred to as the First Congo War.

By 1998, relations had begun to sour between Kabila and his former allies in Uganda and Rwanda. Displeased, both the Rwandan and Ugandan governments began to build a political and military campaign against the administration in Kinshasa, and in August 1998 launched a second war in DRC that would last until 2002. Breakaway factions of the Congolese army, supported by Rwandan troops, announced control of major cities in the east (including Goma and Bukavu), and sparked a mass displacement of people fearing violence. Rwanda and Uganda both initially backed the Congolese Rally for Democracy (Rassemblement Congolais pour la Démocratie, RCD), an anti-Kabila rebel group based in Goma, but their partnership eventually dissolved, with Uganda going on to sponsor its own rebel movement, the Congo Liberation Movement (Mouvement pour la Libération du Congo, MLC), as well as breakaway factions of the RDC.

Other countries were soon drawn into the conflict, with Zimbabwe, Burundi, Angola, Namibia, Chad, Eritrea and Sudan all involved during its course, to varying degrees. For Uganda and Rwanda, the continued threat of Hutu armed groups based in the east of the DRC sparked their involvement, but territorial aspirations and resource control soon fuelled the war. Rival factions

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8 ibid.
eventually split the country into three sections: Uganda and the MLC controlled a swath of the north; the RCD and Rwanda controlled much of the east and centre; and the Congolese government occupied the south and west.

On January 16, 2001, Laurent Kabila was shot and killed during a failed coup; he was replaced 10 days later by his son Joseph. Fighting continued, and after nearly a year and a half of failed attempts at dialogue and negotiations, a peace agreement was finally signed between warring parties in April 2002. This fragile peace has held through the installation of a power-sharing transitional government in 2003, a new constitution in 2005 and, finally, democratic elections in 2006, which formally consolidated Joseph Kabila’s power.

Despite the peace agreement, insecurity continues to govern the lives of the residents of DRC’s eastern provinces. The continued presence of Hutu militias along the DRC’s eastern border, along with Mai-Mai rebels, has contributed to persistent insecurity. In addition, in August 2007 Congolese army general (and Tutsi) Laurent Nkunda responded to what he saw as collusion between Hutus active in the Congo and the Congolese army by breaking with the national army and forming his own rebel force—the National Congress for the People’s Defense, CNDP—based out of the park’s Southern Sector. The CNDP is said to operate with the tacit support of the Rwandan government, as Laurent’s Tutsi forces fight Interahamwe and Hutu rebel forces while effectively giving Rwanda access and control over many of the resources found in and around the section of PNVi that borders Rwanda. Despite repeated ceasefires, fighting continues through 2008.

The DRC’s vast mineral and forest resources have played a significant and well-documented role in driving the region’s conflicts. With profit made possible for many by the continued state of insecurity, economic gains have often trumped victory as a primary goal of the fighting.

Throughout its campaign, Kabila’s AFDL funded its activities with cash generated from mineral commodities sales, including the sale of commodities it did not yet control (so called “booty futures”), promised to private companies once victory was assured. Hutu extremists who re-organized themselves as the Democratic Forces for the Liberation of Rwanda (Forces Démocratique

de la Libération du Rwanda, FDLR) continue to fund their operations through mining gold, tin and other minerals, ivory and bushmeat and through the production and trade of charcoal.  

In an April 2001 report to the UN Security Council, a UN Panel of Experts recommended sanctions against countries and individuals involved in the illegal exploitation of natural resources in the DRC, and noted that top officers in both the Rwandan and Ugandan armies had economic and financial objectives underpinning their decision to invade in 1998. The Panel also cited empirical data that confirmed that in many neighbouring countries during the Second Congo War, export values for commodities exceeded national production values, a disconnect it believed could be explained by resource plunder in the eastern DRC: Rwanda increased its mineral production during the war, and had been exporting diamonds, despite its denials; Burundi began exporting minerals that it did not even produce, with diamond exports coinciding with the occupation of eastern DRC. The revenues from these exports are believed to have funded military expenditures; for neighbouring countries, budget allocations for armed forces were exceeded by actual military spending, and the shortfall is believed to have come from the sale of expropriated DRC resources. This accounts for why Rwandan President Paul Kagame once referred to the conflict in the DRC a “self-financing war.”

“With a blurring of the lines between civil and regional war, and conventional and unconventional war, civilians became the primary victims of the conflict. Caught in between rebel and conventional armies, and in the context of the severe militarization of society and the marked collapse of basic infrastructure, civilians suffer most of the ravages associated with the war.” The Swedish International Development Cooperation Agency wrote these words in their 2004 analysis of the Great Lakes conflict, and not much had changed three years later. By that time, the International Rescue Committee (IRC) estimated that between August 1998 and April 2007, 5.4 million people had died as a result of conflict in the region, making this war the world’s deadliest since 1945. Most of the casualties were civilians, and almost half children. Many died not from violence but rather from preventable and treatable conditions that could have been dealt with in a peaceful setting: diarrhoea, malaria, pneumonia and malnutrition.

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13 ibid.
14 ibid.
15 ibid.
Persistent insecurity in the eastern provinces of the country continues to exact a significant toll on the regional population: mortality rates are higher in these provinces than elsewhere in the DRC. Despite the formal end to the national-level conflict in 2002, the death toll continues to mount; the IRC estimates that 2.1 million of the war’s total deaths have come since the signing of the peace deal.\(^{18}\)

This humanitarian crisis is taking place against the backdrop of one of the world’s most biodiverse and important ecosystems, Virunga National Park. The impacts of the local and regional conflicts—both direct and indirect, covered in the next section—are threatening the park’s survival. And while it would be wrong to prioritize conservation over the very real needs of suffering local and refugee populations, sustainable development and environmental protection cannot be set aside; the ecosystem services, natural resources and tourism potential of the park will undoubtedly play an important role as the economy rebuilds once peace is re-established.

3. **Links between conservation, conflict and peace in PNVi**

The Virunga landscape is home to some of Africa’s richest biodiversity. Unfortunately, as the previous section outlined, the area surrounding PNVi has also been the site of some of the continent’s most intense social and political conflicts.

Conflict itself is not necessarily a negative thing; when resolved peacefully, it can be a force for positive change. Violent conflict, on the other hand, always has negative repercussions; it refers to the actions, attitudes or systems that cause physical, psychological, social or environmental damage.\(^{19}\) Violent conflict and its impacts on conservation are the focus of this paper.

Conservation interventions themselves are inherently conflictual. Any decision to pursue conservation activities, including the gazetting of a park like PNVi, will undoubtedly create some level of conflict, as it is a decision involving access and control over valuable natural resources. This is particularly an issue in developing countries, where dependence on the natural environment is high and where interventions that affect access to and management of natural resources will have impacts on livelihoods, the distribution of wealth, established power structures and group identities.\(^{20}\)

In eastern DRC, conservation interventions take place against a backdrop of social inequality, poverty, corruption and ethnic tension; the potential for conservation becoming politicized and

\(^{18}\) ibid.
generating grievances in such a setting is high.\textsuperscript{21} Research has identified three principal ways in which conservation can itself lead to conflict: by restricting access to livelihood resources for surrounding communities; by introducing or increasing the costs of conservation; and through unequal benefit sharing.\textsuperscript{22}

Conservationists and policy-makers have to be sensitive to the potential for conflict arising from their interventions. However these relationships (the impacts of conservation on conflict) are not the primary focus of this paper. Instead, this analysis focuses on reducing the impacts of conflict on conservation.

In 2001 the World Wildlife Fund’s Biodiversity Support Program released \textit{The Trampled Grass}, a guide to mitigating the impacts of armed conflict on the environment. In times of conflict, especially the prolonged conflicts that have affected PNVi, conservationists are exposed to a number of threats. Habitats are destroyed and wildlife killed. Natural resources are overexploited, both for subsistence by a suffering population and for profit by those keen to take advantage of the chaos. Pollution grows as refugees and the displaced live in increasingly crowded spaces. Park staff are threatened and even killed by warring factions vying for park resources. Conservation funding sources can dry up, as insecurity scares off donors and the environment slips down the priority list in favour of needed humanitarian interventions. The ensuing environmental degradation and poverty can in turn lead to new conflicts.\textsuperscript{23}

This section focuses on how the regional conflicts described in the previous section have impacted—and continue to impact—PNVi. It first lays out the conservation context, describing the park in detail before going on to some of the impacts two decades of violence have had on the park, its biodiversity and its ecosystems. It concludes with two more detailed cases that illustrate how local and regional conflicts have affected parts of the park: the first looks at Lake Edward and the collapse of its fishery, the second at charcoal production in the park’s Southern Sector.

### 3.1 Virunga National Park (PNVi)

Virunga National Park (Parc National des Virunga) is Africa’s oldest park, and its most diverse. It boasts a remarkable range of biodiversity, with the highest number of mammal, bird and reptile species of any park in Africa. Unfortunately for the past two decades, the park and its environs have been a theatre of near-constant violent conflict, threatening the species, habitats and communities that depend on the park and its ecosystem services for their survival. Despite these threats, the park survives and can be rehabilitated.\textsuperscript{24}

\textsuperscript{21} ibid.
\textsuperscript{22} ibid.
Park history

The area now considered PNVi was first protected as Albert National Park (ANP) in 1925, making it Africa’s first national park. ANP was situated largely in the province of North Kivu in the eastern DRC, straddling the Equator along the border with Uganda and Rwanda. In 1929, Virunga National Park was established as an extension of ANP, and in 1969 the entire protected area was designated Virunga National Park, excluding the area which became Parc National des Volcans (PNV) in Rwanda. PNVi was designated a Natural World Heritage Site by UNESCO in 1979, and subsequently placed on the List of World Heritage Sites in Danger in 1994 due to the growth of permanent settlements inside the park boundaries and pressures resulting from the refugee crisis that followed the war in neighbouring Rwanda; it remains on this list. In 1996 the UN designated the park a Ramsar wetlands site.

Park geography

PNVi is a sizeable park, covering 784,368 ha of land along a narrow north-south axis that stretches 300 km along the DRC’s eastern border with Uganda and Rwanda. Most of the park falls within the Albertine Rift, the western arm of the Great Rift Valley that extends through the east of much of the African continent.

The park’s unequalled range in habitat and landscape diversity is in part attributed to its dramatic altitude scale, ranging from more than 5000 m in the Rwenzori Mountains in the north, to the lowland confluence of the Semliki and Puemba rivers at 680 m. This varied topography lends itself to more unique habitats than any other park in Africa: from the glaciers of the Rwenzoris through the montane forests of the Virunga volcanoes, to the savannas, swamps and steppes of the low-altitude plains.

Park management divides PNVi into four main sectors. The Northern Sector, managed out of Mutsora station, is the biggest part of the park in terms of land area.\(^{26}\) It extends from the Puemba River in the north to Lake Edward in the south, and largely follows the course of the Semliki River, which flows north from Lake Edward across the Uganda border into Lake Albert. The aforementioned Rwenzori Mountains straddle the sector’s eastern border with Uganda, and contain the third, fourth and fifth highest peaks on the continent. The altitude contrast in the Northern Sector is particularly stark; habitats change dramatically in only 30 km as one moves from the Semliki at 800 m to the Margarita Peak of Mount Stanley at 5109 m.\(^{27}\) Agriculture is the primary form of livelihood activity in the region, particularly in the region of Butembo-Beni on the western flank of the sector.

The park’s Central Sector is dominated by Lake Edward, which is bisected by the DRC-Uganda border and whose Congolese waters fall within the jurisdiction of the Institut Congolais pour la Conservation de la Nature (ICCN) and the park (the same is not true on the lake’s Ugandan side; the Ugandan Wildlife Authority [UWA] does not control Uganda’s half of the lake or its ecosystem). The lake’s western coast is comprised of a narrow corridor running between the Mitumba range and the water; ranging from three to five kilometres wide, this corridor was, until recently, used by park fauna such elephants to migrate between the northern and southern sections of the park. About two thirds of Lake Edward’s waters are in the DRC, with much deeper waters on the Congolese side becoming gradually shallower towards the lake’s Ugandan side.\(^{28}\) Immediately south of the lake is a grassy and semi-forested savanna.

The park’s Eastern Sector is its newest, recently separated from the Central Sector for management purposes. The sector lies to the southeast of Lake Edward, and encompasses both Nyakakoma fishing village and the former research station Lulimbi (which has now been converted into an ICCN management post). The sector is bordered on the west by the Rutshuru River and on the east by the Ishasha River, which flows along the Ugandan border; just across that border is Uganda’s Queen Elizabeth National Park.

\(^{26}\) ibid.
\(^{27}\) ibid.
\(^{28}\) ibid.
The Southern Sector of the park is characterized by a range of active and extinct volcanoes, which lend the park its name ("Virunga" means volcano in Kinyarwanda). In the southwest lie Nyamulagira (3056 m) and Nyiragongo (3470 m), two of the most active volcanoes in the world; Nyiragongo’s 2002 eruption made international headlines when its lava flow reached Goma, displacing hundreds of thousands from this nearby city on the shore of Lake Kivu. Further east, Mikeno is the only extinct volcano wholly placed in PNVi; Sabinyo, Gahinga and Muhavura link to it in a chain that extends along the borders with Uganda and Rwanda. The presence of so many volcanoes has given the southern sector rich soils and an ecosystem—partially intact—of dense, humid montane forests. It is within this ecosystem that PNVi’s most famous resident, the mountain gorilla, can be found.

**Park biodiversity**

Due to its varied topography and ecosystems, PNVi is often cited as the most biologically rich protected area in Africa. According to Languy and de Merode (2006), the park contains more than 700 bird species—two times the Western European total—and almost 220 mammals, another African record. It holds a number of the species endemic to the Albertine Rift, and—worryingly—has among the world’s highest number of mammals threatened with extinction (13). This underlines the park’s position as a globally significant biodiversity hotspot; whether the threats posed to this biodiversity by conflict can be overcome remains to be seen.

In 1960, the biomass of savanna ungulates south of Lake Edward was recorded as 27,619 kg/km²—a record at the time, higher than that observed in Serengeti National Park in neighbouring Tanzania. This high figure was largely due to the presence of the world’s largest population of hippopotamus, which in 1974 was approximately 29,000 animals. Another prominent ungulate in the park is the okapi, a distant relative of the giraffe that bears stripes similar to those of a zebra; this elusive animal was photographed for the first time in the wild in 50 years in Virunga in the summer of 2008, a heartening sign considering its habitat has been the site of conflict for so long. Other mammals include lions, elephants, buffalo and 22 species of primate, although many populations have been hit hard by habitat loss and poaching. Birdlife remains rich, primarily due to the park’s position; PNVi is found at the confluence of central and east African birdlife, and many migratory species either winter in the park or stop there during their migrations.

Foremost among PNVi’s species—in terms of international attention, economics and threatened status—is the mountain gorilla. Only about 720 of these animals remain in the wild, split between the three countries in the Virunga landscape. Approximately 200 live in the Mikeno section of

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30 ibid.
31 ibid.
32 ibid.
33 ibid.
PNVi’s Southern Sector; 120 are found in PNV, Rwanda; a handful in Mgahinga Gorilla National Park in Uganda; and the remaining half in Bwindi Impenetrable National Park in Uganda. Before the recent conflict in the Mikeno Sector shut down tourism operations, these great apes were responsible for 90 per cent of the tourism receipts for the park—a huge figure considering the dependence of ICCN on such receipts for their operating budget.

Park management
The high degree of flora and fauna endemism found in PNVi means that the park holds strong scientific and conservation value. This conservation depends on the proper functioning of the country’s wildlife authority, ICCN. ICCN is directed by the Ministry of the Environment, Conservation and Tourism, and is headquartered in Kinshasa. The Provincial Director (Directeur Provincial, DP), working from the Southern Sector management post of Rumangabo, oversees conservation activities in the park. Under the DP, each sector has a chief warden, who directs the activities of the approximately 650 rangers currently working to protect the park’s resources.

For decades, ICCN-PNVi has been plagued with a number of challenges: corruption; insufficient funding and a lack of support from national authorities; increasing population pressures; rural poverty; complicity of its staff in illegal activities; trying to operate in a conflict zone; and making resource allocation decisions in a region where there is less and less to go around to more and more people. Nevertheless, the park’s survival to date is a testament to work of ICCN, its rangers and the conservation organizations working in the region.

3.2 Impacts of conflict on PNVi
Environmental threats to the Virunga landscape, prior to the recent conflicts, were numerous: widespread deforestation driven by energy and construction demands; feeble environmental legislation; weak institutional capacity; inappropriate agricultural practices; the degradation of the environment inside protected areas, posing a threat to biodiversity; and inadequate approaches to environmental education and awareness. These threats, significant prior to 1990, were compounded by the ensuing two decades of violence.

Measuring the environmental losses suffered by PNVi over this period is difficult due to the absence of reliable data before the wars, and the difficulty of collecting such data during times of insecurity. Despite these constraints, some observations can be made that point towards significant direct and

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36 ibid.
indirect impacts resulting from the local-level rebellions and international armed conflicts that have plagued the region since the 1980s. According to Kalpers and Mushenzi (2006), these include:

Direct impacts on biodiversity:
- direct and often deliberate destruction of the environment (i.e. deforestation or land clearing to limit or stop ambushes);
- the use of park-based natural resources to finance conflict; and
- movement and settlement of refugees displaced by conflict, and the extraction of park-based natural resources by these populations.

Indirect impacts:
- logistical constraints and safety threats to park staff;
- financial constraints as funders withdraw in the face of armed conflict and tourism receipts decrease; and
- a shift in priorities as national authorities let environmental considerations slip down their list of priority issues and resources are diverted to the humanitarian crisis.

Threats to the park pre-date the 1994 Rwandan refugee crisis. Mobutu’s decision to end single-party rule in 1990 led to the formation of a number of rebel groups in PNVi’s Northern Sector; patrol posts were attacked, guards and their families killed, looting increased and IZCN (ICCN’s former name when the country was known as Zaïre) increasingly lost control of the north of the park. This insecurity prompted UNESCO—in October 1993—to conduct an evaluation of the park and subsequently place PNVi on the list of World Heritage Sites in Danger, a decision taken before the Rwandan genocide.

In neighbouring Rwanda, the January 1991 offensive of the Rwandan Patriotic Front (RPF) in the northwest of the country signaled the first time the Virunga Massif became a theatre for military operations. Strategists realized that the forested zone between Rwanda, Uganda and DRC provided cover and retreat options, and as the RPF began using the cover of Sabinyo volcano (which lies at the border of all three countries) to move around the region, the transboundary area became the site of infiltration (by the RPF) and searches (by the Rwandan Armed Forces, FAR). Hundreds of mines were laid in the forest, particularly along the Rwanda-DRC border.

The environment and protected areas were not severely affected during the hundred days of Rwanda’s genocide in 1994. However the victory of the RPF triggered the mass displacement of two million Rwandans, mainly Hutus fearing Tutsi retribution; many fled to Zaïre across the Virunga,
with livestock in tow. On July 15 alone, 500,000 arrived in Goma, with a further 300,000 following in the next few days.\textsuperscript{42}

These refugees came to Goma seeking water, firewood and food, all things readily available in PNVi.\textsuperscript{43} Five refugee camps were constructed (Kibumba, Mugunga, Katale, Lac Vert and Kahindo), and by the end of 1994, 720,000 refugees were settled on the border of the park.\textsuperscript{44} They would stay there for over two years, and have a significant impact on the Southern Sector of PNVi.

Key impacts were:

**Deforestation:** Cutting and collecting firewood for construction and cooking quickly became a threat to the park. At the beginning of the crisis, 40,000 people were entering the park every day to look for wood; this figure went as high as 80,000 on certain days over the next 27 months. Within two years, 105 km\(^2\) had been affected by deforestation and 35 km\(^2\) completely cleared.\textsuperscript{45}

**Poaching:** With many refugees having retained their weapons and ammunition, poaching increased in the Southern Sector, particularly attacks on antelope, elephants and buffalo.

**Security:** The security situation deteriorated, primarily due to the presence in the camps of ex-Rwandan Armed Forces soldiers, and Interahamwe and Hutu Power rebels (those responsible for the genocide). IZCN lost complete control of portions of the Nyamulagira and Mikeno Sectors.

**General disorder:** Illegal activities increased in the park as a result of the period’s disorder.

**Fall in tourism receipts:** The refugee crisis and the state of insecurity led to a significant drop in tourism to PNVi.

The fact that Rwandans and not Congolese were primarily responsible for the environmental destruction around PNVi generated significant tensions between the local population and the refugee camps. In addition, the international community’s shift in focus from conservation activities to the humanitarian crisis—after a feeble response to the Rwandan genocide—was soon matched by President Mobutu, and environmental destruction ceased to be considered a priority area during the crisis.\textsuperscript{46}


\textsuperscript{45} ibid.


The general state of conflict and anarchy that followed the Rwandan refugee crisis continued to weaken the capacity of ICCN to manage and protect PNVi. With the launch of the First Congo War (1996—1998), rebel groups, the Congolese Armed Forces (FARDC) and foreign militaries from Uganda and Rwanda operated in and around PNVi, with the park often serving as a battleground.

ICCN was heavily affected during the conflicts. Rangers were killed and wounded by combatants from all sides; since the insecurity began, 120 park rangers have been killed in the line of duty.47 Park infrastructure was damaged, either by local populations looking for building materials or by combatants systematically destroying infrastructure. Illegal activities, from deforestation to poaching, were practiced by the different military forces in the region, while military units, along with thousands of displaced people, began cultivating crops within the park boundaries. This was particularly problematic in the Northern Sector, where park staff retained little local legitimacy; during the conflict, ICCN lost most of its control over this part of PNVi.48 Agricultural encroachment also eventually cut off the migratory corridor along the western coast of Lake Edward. ICCN could do little to stem the tide of destruction being wrought on the park, and as the insecurity kept tourists away, ICCN’s operating budget all but disappeared.49

Continued insecurity (2004—present)

The exploitation of natural resources in and around PNVi as a driving force for the Congo Wars has been covered already. Unfortunately the high immediate value of natural resources from the DRC, and the presence of ready markets, endangers the security of the country’s biodiversity. This is facilitated by the absence of a functioning state and parks authority; as Hart and Mwinyihali explained in 2001:

“The DRC is currently experiencing a trade-off between natural resources of known commercial value and biodiversity of undetermined value. It is not surprising that without a credible national government to protect its natural heritage, the known value of valuable resources—gold, diamonds, timber and tantalite—becomes the only credible tender for profiteers of all political labels.”50

This is not to say that the DRC’s biodiversity did not itself hold significant commercial value, value exploited during the conflict. Before the conflict, the country accounted for more than a third of

47 Personal interview, Goma, April 2008
Africa’s ivory exports, with much of the ivory taken from areas within and around six of the country’s national parks, including PNVi. The rate of offtake, all of it illegal, took a sharp upturn in the mid-1990s. Logging increased in the park, primarily to meet the energy and construction materials demands of the region’s expanding cities and refugee camps. And the bushmeat trade, particularly with regards to the park’s hippo population, increased.

Two cases illustrate how insecurity continues to seriously threaten the ecosystems and biodiversity of PNVi: illegal fisheries and the hippo slaughter on Lake Edward, and charcoal production in the park’s Southern Sector.

### 3.3 Case study: Lake Edward

Lake Edward is the smallest of Africa’s Great Lakes, straddling the border of Uganda and the DRC just south of the Equator. Within DRC, the lake is considered part of PNVi: its shoreline and waters falling under the protection and management of ICCN. Until recently, it was considered one of Africa’s most productive fisheries, and hosted the largest population of hippo in the world. Conflict has changed this, facilitating widespread poaching and overfishing which have in turn come to threaten both the lake’s ecological balance and the economic livelihoods of those who depend on it.

When Albert National Park was founded in 1925, a number of small fisheries existed within its proposed boundaries. Instead of being expelled from the park, two of these fisheries—Vitshumbi on the southern coast and Kyavinyonge on the northern coast—were allowed to continue operating; eventually a third village—Nyakakoma, also on the lake’s southern shore—developed and was allowed to remain, tolerated while not officially recognized as a “legal” fishery on the lake. To maintain the balance between conservation and the economic and nutritional needs of the surrounding communities, ICCN dictated that a maximum of 700 pirogues, or fishing boats, were permitted to operate on the Congolese side of the lake; allowing more boats could threaten this delicate balance.

Lake Edward’s exceptional productivity was in large part due to the presence of the hippo population, which in 1974 numbered more than 29,000 animals. Hippos were a vital part of the lake’s ecosystem, as they consumed an enormous amount of biomass which was then deposited into the aquatic

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51 ibid.
ecosystem in the form of fertilizing dung. This dung fed microscopic plankton, which were in turn consumed by the worms and larvae that fed the lake’s fish population.

By late 2006 the situation had changed considerably. Lake Edward was no longer one of Africa’s richest lakes, but rather teetered on the edge of collapse, the hippo population decimated and fish catches palming in comparison to historical levels.

Population pressures, economic migration towards the fisheries and institutional weaknesses resulting from the conflict have led to a significant expansion of all three fisheries: Vitshumbi grew from only 92 fishers at the park’s creation to 10,000 in 1989, and accelerated to 24,000 in 2000; Kyavinyonge had up to 6,000 people in 1989, and at least 20,000 inhabitants by 2006; while Nyakakoma tripled in size between 1994 and 2006, from 1830 residents to 4,935. The number of buildings in the three sites grew from just 165 in 1959 to 3,661 in 2006—a twentyfold increase over 50 years.53

In addition, in the mid-1990s a number of illegal fisheries began to appear on the lake’s western coast. No state or ICCN permission had been given for the establishment of these fisheries, but their illegal presence was made possible by the conflict, for during these years ICCN could not exercise the necessary control to dismantle them.54 In fact the first of the illegal fisheries were founded on ICCN patrol posts; the economic crisis brought on by the war, coupled with low staff salaries, made the direct and indirect revenues that could be made through fishing increasingly attractive for ICCN guards. In all, 10 illegal fisheries were established and supported a population of 10,000, many of whom moved in to PNVi to supplement their income while maintaining agricultural lands outside of the park. Their settlement on the lake’s western shore is particularly impactful, as it is believed to have cut off the migratory corridor previously used by park animals to move between the southern and northern sectors of PNVi.

A limit of 700 pirogues on Lake Edward would ensure that fishing activity would not outpace the lake’s natural regenerative capacity. However the expansion of existing fisheries and the establishment of illegal ones meant that by 2005, over 2000 boats were working on the lake. Many of these were operating in spawning grounds, threatening the lake’s reproductive potential. In addition, fishers were frequently using nets below the minimum size requirements.55

54 ibid.
The expansion of the Lake Edward fisheries and changes in fishing techniques would have alone been enough to threaten Lake Edward’s ecosystem. However the regional conflict and disappearance of most governance on the lake facilitated the widespread poaching of the lake’s once-large hippo population. Hippos are now on the verge of extinction in the park, killed by militia and soldiers as well as local poachers. Their meat typically sells for US$0.25 to $0.50 per pound on the black market—less than the price of goat meat—and their teeth often end up as part of the illegal ivory trade. While estimates vary, surveys of the lake put current hippo numbers somewhere between 300 and 600 animals, a staggering crash since the 1970s. Towards the end of 2006, the killing intensified; in the run-up to the second round of presidential elections, UN peacekeepers had announced there would be no anti-poaching operations in the park until after the elections to avoid provoking unrest. Within days Mai-Mai rebels were in PNVi carrying out industrial-scale poaching.

These actions, facilitated by conflict, have cumulatively led to:

- overfishing, due to the expansion of fishing villages;
- deteriorated birth rates, due to fishing in spawning grounds;
- decreased reproduction, due to fishing with nets smaller than legal limits; and
- decreased lake productivity, due to the decimation of the hippo population.

Today, one kilogram of fish caught on the Ugandan side of Lake Edward is made up of two fish; on the Congolese side, that same kilogram is made up of six fish. This reduced productivity directly impacts the economic livelihoods of the communities surrounding the lake, and has even driven Congolese fishers to illegally cross into Uganda looking for fish.

While plans have been made to resettle the illegal populations fishing along the park’s western coast, the villages have yet to be cleared. Regardless, it is unlikely that ICCN would have the capacity to

keep these populations from re-entering and re-settling in PNVi; conflict continues to restrict their financial and logistical ability to react to the situation.

3.4 Case study: Charcoal production and trade, Southern Sector

PNVi’s Southern Sector is home to the park’s mountain gorillas. About 200 of the animals live there, and through the years of conflict, the population’s survival has exceeded most expectations; all in all, the mountain gorillas in Rwanda, Uganda and DRC escaped the worst of the fighting.

That held true until the summer of 2007, when 10 gorillas were murdered in Mikeno Sector, the eastern part of the Southern Sector, which borders the two neighbouring countries. These killings were not carried out by poachers, as the bodies of the dead animals were simply left in the jungle intact. When arrests were finally made, the accused were instead linked with the region’s lucrative and illegal charcoal trade, and included corrupt members of the Congolese wildlife authority.

Corruption and institutional weakness play a significant role in the production and trade of charcoal in the park’s Southern Sector. This trade, which through extensive deforestation is threatening significant parts of the park, is carried out by rebels, soldiers and local profiteers, and came into existence in part to meet the energy needs of the enormous refugee population still living in the area, most of them displaced by conflict.

More than three million people live within a day’s walk of the park. Most of these rely on charcoal as their primary energy source, with alternate sources severely limited or non-existent for the majority of villages bordering the park. This energy deficit means that for millions the park continues to serve as the primary source of energy in the region.59

The major demand centres for charcoal are these villages, refugee camps bordering the park and the area’s major cities, including Goma. In 2006 Goma’s population was listed as 550,000. With 97 per cent of its households relying almost exclusively on charcoal for their energy, this demand translates

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into roughly 1,355,000 sacks of charcoals per year.\textsuperscript{60} 24,000 hectares of forest are needed to meet this demand, and much of it comes from the park, where old growth trees are prized for producing charcoal that burns longer and hotter.

This only represents Goma; regional demands are, of course, much higher. While there have been some small-scale successes in breaking up the trade (ranger patrols dismantling kilns inside the park; the confiscation of illegal charcoal on the park boundaries), the charcoal business continues to thrive. It is estimated to be worth US$30 million per year.\textsuperscript{61} These revenues have attracted a number of disparate groups into the trade: the Hutu-dominated FDLR, responsible for Rwanda’s genocide, control production around Nyamulagira and Nyiragongo volcanoes in the west of the sector; the Congolese army frequently uses government trucks to smuggle charcoal out of the park; while Tutsi-backed Laurent Nkunda has controlled Mikeno Sector and its production since September 2007.

In more peaceful times, gorilla tourism brought millions of dollars in to the region; permits, hotels and transportation combined to generate significant revenue for the local economy. But tourism has dried up with insecurity, and stopped altogether in August 2007 when Nkunda and the CNDP took control of Mikeno Sector. This has further eroded ICCN’s already anemic operating budget and severely limited conservationists—including veterinarians—from accessing and monitoring the animals. Nevertheless, the US$300,000 that gorilla permits earned in 2006 pale in comparison to the profits available in charcoal,\textsuperscript{62} and as a result, PNVi’s southern habitat is under threat; up to 25 per cent of the old-growth hardwood forest in the park’s southern half is believed to have been completely cleared.\textsuperscript{63}

The gorilla killings of the summer of 2007 were eventually linked to PNVi’s chief warden, Honoré Mashagiro. Mashagiro is accused of being involved in the charcoal trade, and his order to execute the gorillas was seen as a strong message to PNVi staff trying to dismantle that trade in the interests of the animals and their habitats. While removed from his post, Mashagiro has yet to face punishment.

4. MEAs, conservation and conflict: Shortcomings and entry points

The protection and preservation of unique ecosystems like PNVi was one of the main reasons the international community came together in the early 1970s to begin drafting multilateral


\textsuperscript{63} ibid.
environmental agreements (MEAs). A multilateral environmental agreement is “an intergovernmental document intended as legally binding with a primary stated purpose of preventing or managing human impacts on natural resources.”

Under the UN, a number of MEAs relevant to conservation exist, and the DRC is a signatory to all of them, including: the Convention on Wetlands of International Importance (Ramsar, 1971), the UNESCO World Heritage Convention (1972), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES, 1973), the Convention on Migratory Species (1979) and the Convention on Biological Diversity (1992), among others.

Despite the proliferation of relevant environmental conventions and the DRC’s participation in them, environmental destruction continues for PNVi. The previous sections have illustrated the unique biodiversity of PNVi, and the high degree to which violent conflict has impacted the park in recent years. Corruption has undoubtedly played a role, but the near-collapse in governance has been brought about in part by chronic local and regional conflicts. PNVi is in crisis: its boundaries encroached upon by the surrounding local and refugee populations, its habitats destroyed by overfishing and charcoal production, its animals killed for meat and ivory. Conflict has significantly contributed to the fact that the UN’s environmental conventions are not able to achieve their stated objectives in the park.

For conservationists working in the region, the MEAs hold little practical value on the ground. Consultations in the area indicate that in many cases, people working and living in the area have limited or no knowledge of environmental laws, both domestic and international; this extends to local, provincial and national authorities; ICCN; guards; and magistrates, lawyers and judges. For those aware of the MEAs, they are seen useful tools in theory, but the practical ability to implement them on the ground is lacking, as the state and ICCN have little capacity to meet MEA conservation objectives. Conservation lobbyists working on the ground in PNVi to identify and report infractions on domestic and international laws also have a hard time working with the Conventions. Oftentimes they face an uphill battle; chronic corruption has meant that infractions are frequently committed by those meant to be protecting against them—particularly with regard to trade in animals and their products.

65 Personal interview, Goma, April 2008
66 Personal interview, Goma, April 2008
This is not to suggest that multilateral environmental agreements have had no impact on park. The 1979 designation of PNVi as a World Heritage Site brought international attention and tourism to the park, and its unfortunate placement on the List of World Heritage Sites in Danger in 1994 brought more international attention to the environmental crisis. Trilateral initiatives surrounding transboundary resource management, particularly with regards to mountain gorilla conservation, have helped protect the species while building relationships and trust between the DRC, Rwanda and Uganda. However the Conventions themselves, drafted and signed before policy-makers and researchers had started to think about the environmental impacts and drivers of conflict, can and should do more to protect PNVi against the threats posed by conflict. This section broadly introduces international environmental governance before focusing on five specific UN Conventions (UNESCO World Heritage, CBD, CMS, CITES and Ramsar), identifying the shortcomings and entry points present in each for addressing the impacts of conflict on conservation in PNVi.

4.1 International environmental governance reform

International environmental governance is a broad term. It includes not only the key international institutions involved in environmental policy-making (the United Nations Environment Programme [UNEP], the UN Commission on Sustainable Development [CSD], etc.), but also the institutional arrangements that have been established under the various multilateral environmental agreements themselves.

The growth of MEAs since the 1972 Stockholm Conference on the Human Environment has been significant: there are now more actors, money, and rules and norms than ever before. According to some estimates, over 500 MEAs—the majority of them regional arrangements—have been signed, with a reported 155 that specifically address biodiversity and conservation concerns.67

Najam et al. (2006) conclude that despite the development of MEAs and international environmental governance bodies, the degradation of ecosystems that are critical to human survival continues unabated in many parts of the world.68 This is particularly true of countries that are either immersed in conflict or that are struggling with the challenges of post-conflict recovery and reconstruction. Six broad conclusions can be drawn relating to why MEAs have to date been largely ineffective in reversing environmental decline and addressing environmental concerns stemming from conflict.

First, it is clear that the MEAs need to respond to the challenges of their own growth by moving beyond treaty creation and awareness-raising to actual environmental action and implementation.69 A number of reform initiatives undertaken since 1997 (see Annex 2) have identified the challenges that must be addressed if MEA implementation is to improve. Many of these are directly relevant to the DRC as it struggles to meet its MEA commitments. For example, to protect and conserve important ecosystems developing countries require an enhanced capacity for scientific assessment, monitoring and early warning. Oftentimes, particularly in conflict situations, the resources to carry out these necessary activities have all but vanished; as budgets dry up, species cannot be monitored, environmental decline trends cannot be understood and appropriate policy responses cannot follow. To succeed, MEAs must work to support the development of this scientific capacity.

Second, developing countries require particular support in their efforts to develop environmental policies that are clearly embedded in a larger context of sustainable development policies. The post-conflict recovery period provides important opportunities for governments to strengthen the links between environmental law and policy and economic development plans, poverty eradication efforts and security sector reform. The governance challenge of strengthening integrated approaches to policy-making has been reflected in the various global environmental governance reform initiatives, especially the Johannesburg Plan of Implementation (adopted by over 190 countries at the 2002 World Summit on Sustainable Development).

A third environmental governance reform challenge is the importance of including non-governmental organizations and civil society in the development of sustainable development policies. This is a particular challenge for those countries that do not have a tradition of participatory democracy. Public participation in environmental governance has been the subject of intense debate at the international level. Principle 10 of the Rio Declaration on Environment and Development specifically calls on governments to ensure citizen access to information, participation in decision-making processes and access to justice. Yet many developing countries in Africa have experienced serious impediments to the realization of the three pillars set out in Principle 10, notably overall lack of environmental awareness, lack of accessibility to information resources (especially in rural areas), and the financial and other burdens connected to access to justice.70 This is certainly the case for the DRC, and in this regard, it is important to highlight the efforts that have been undertaken by UNEP to assist African countries with the challenge of strengthening environmental governance, especially the challenge of improving participatory decision-making and improving overall MEA implementation and enforcement.

69 ibid.
A fourth environmental governance challenge relates to the impact of treaty proliferation. At the international level, the proliferation of MEAs has led to an overall weakening of policy coherence and synergy, and this has seriously impeded the realization of each MEA’s substantive objectives. At the country level, a proliferation of conventions has created tremendous burdens on the institutional infrastructure; for the DRC, with its national institutions severely weakened and eroded by years of conflict, its limited environmental institutional capacity is already stretched to the full extent possible. This is especially so in terms of MEA-specific reporting obligations, enforcement and implementation challenges, not to mention additional financial burdens.

The next challenge relates to the difficulties of complying with and enforcing MEAs. At the international level, the enforcement challenge pertains to the limited scope offered by MEAs to establish robust compliance regimes. Most MEAs do have specific arrangements for addressing non-compliance among signatories. These vary from specialized compliance committees, to recourse to the Conference of the Parties (COP) governing the MEA in question, to monitoring and reporting schemes. However, for the most part, these have been proven to be sub-optimal, the fundamental problem being that when governments violate environmental norms which fall under an MEA, they are not subject to any compulsory judicial mechanism.71

At the country level, and in particular in the case of the DRC, the capacity to enforce MEAs is directly tied to the ability of the government to develop the necessary institutional frameworks needed to: designate and coordinate responsibilities for law enforcement; verify compliance; enhance enforcement capabilities, especially for public prosecutors and magistrates; and of course, to ensure sufficient public access to justice, specifically to administrative and judicial proceedings.72 In the DRC, these abilities have been significantly compromised by years of conflict.

A final international environmental governance challenge relates to the importance of placing the Global Ministerial Environment Forum at the institutional centre of international environmental governance. The GMEF is a central forum through which the DRC can raise important challenges to environmental management brought on by conflict. However, to do so, its capacity to participate more effectively in this intergovernmental body must be strengthened.

4.2  Broad MEA Entry Points

Equally relevant to the reform efforts for the DRC is the important role played by the Conferences of the Parties (COPs) to each of the MEAs. The COPs are the supreme governing body for a given MEA; they are comprised of the negotiators from those countries that have ratified the MEA in question. For many of the more recent MEAs (i.e. the post-Rio environmental agreements such as

the CBD and the UN Framework Convention on Climate Change), the COPs meet annually to review MEA implementation and to take formal decisions on how best to improve that implementation.

What follows is an analysis of five MEAs that are of particular relevance to the conservation of protected areas: UNESCO World Heritage, CBD, CMS, CITES and Ramsar. In all of the MEAs examined below, the primary entry point for promoting the DRC’s environment-conflict concerns is indeed the COP. While MEA-specific opportunities vary according to the key issues that are currently being addressed by each of their COPs, there are a number of overarching conclusions relevant to the DRC’s future efforts to use the MEAs to help address the threats conflicts pose to its protected areas:

- The importance of coalition-building cannot be overemphasized. Ongoing negotiations within COPs are carried out by voting blocs. For the DRC, it is therefore critical to engage support for its position not only from the African Union, but also from the Group of 77 and China (the principal negotiating bloc to which it belongs).

- Similarly, it is important for the DRC to engage support from its donor governments, most of whom are EU member states. Forging support on a bilateral level will help to broaden the base of support from within the EU. Since the EU is the largest multilateral donor and carries considerable weight within each of the COPs, its support for DRC proposals is essential.

- Non-governmental organizations play an increasingly important role in COP proceedings. Although they are not formal parties to the negotiations, they are instrumental in the strengthening of MEA regimes in light of their direct experience with implementation on the ground. For example, in the UNFCCC COP negotiations, NGO coalitions such as the Climate Action Network have played prominent roles in the actual design of the flexibility regimes established in the Kyoto Protocol. It is critical for the DRC to not only mobilize support from within its own NGOs, but from international NGOs engaged in the country who are influential with other governments.

- Engaging with the MEA Secretariats is also important since they too are growing in influence. The treaty Secretariats possess considerable institutional memory and capacity that can be very helpful to the DRC in choosing the appropriate subsidiary body in which to raise its key concerns.

Outside of the COPs, other broad-level strategies for improving the effectiveness of MEAs in national parks and further integrating conflict into international environment governance are available, and should be pursued. Better access to the Conventions would be very helpful in targeting action and applying pressure. Field consultations indicate that in many cases, people working and living in the PNVi area have limited or no knowledge of these agreements. As such,
sensitization efforts should be stepped up, with the Convention Secretariats working to disseminate information in a number of languages about their Conventions and about international environmental law.

In countries where conservation authorities strongly rely on tourism for their operating budgets, MEAs should facilitate funding and capacity building to make up for lost revenues in times of conflict, as tourists stop visiting and government budgets are diverted elsewhere. Salary support for park staff is one of the most important destinations for this funding; without sufficiently stable and predictable salaries, park staff in PNVi are reported to have been driven by the spectre of increased poverty to supplement their salaries with illegal agriculture and fishing activities inside the park. With sufficient, sustained salaries, this pressure is partially removed and enforcement can improve.

Coherence and collaboration among the Conventions and with other non-environment sectors should be improved to take advantage of potential synergies, co-funding opportunities and the increased attention multiple MEAs working together could focus on ecosystems under threat. This coherence could come about through a variety of UN policy tracks. First, the UN Environmental Management Group (EMG) has, since 2001, sought to enhance UN system-wide coordination among its agencies on environment and human settlements. The MEA Secretariats are members of the EMG, which also includes:

- environmental organizations like UNEP and the Global Environment Facility;
- development organizations, from UNDP to the World Bank and the Regional Development Banks; and
- other organizations which could impact the environment: UNESCO, WHO, the International Maritime Organization, etc.

While not yet gauged a success, the EMG’s mandate does hold promise for PNVi: “to adopt a problem-solving, results-oriented approach that would enable United Nations bodies and their partners to share information, consult on proposed new initiatives and contribute to a planning framework and develop agreed priorities and their respective roles in the implementation of those priorities in order to achieve a more rational and cost effective use of their resources.”74 Elevating the environmental concerns stemming from the conflict, through the MEA Secretariats, to the Group could mean greater environmental awareness and coordination among the many UN agencies working in South Kivu: UNHCR, MONUC, OCHA, UNDP, etc. The actions of most of these groups, particularly UNHCR and MONUC, have significant existing and potential impacts on the park, and working with an improved environmental lens could lessen these pressures. Alternate

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fora for UN coordination include the UN System Chief Executives Board of Coordination (CEB), the Joint Liaison Group (an informal forum for exchanging information and increasing coordination among the Rio Conventions and Ramsar), the Inter-agency Coordination Committee and the Commission on Sustainable Development.\textsuperscript{75}

### 4.3 The UN Multilateral Environmental Agreements

There are a number of MEAs signed at the UN level that are of particular relevance to the conservation of protected areas. What follows is an analysis of five of these MEAs (UNESCO WHC, CBD, CMS, CITES and Ramsar) and the specific entry points which exist within each to better integrate conflict-concerns into their implementation, and in so doing, improve the chances of park survival despite conflict threats.

#### The UNESCO World Heritage Convention

In 1972, the UNESCO recognized the need to identify and permanently protect the cultural and natural sites around the world considered to be of “outstanding universal value,” and adopted the World Heritage Convention (WHC). This convention establishes duties for signatory states to identify potential sites within their borders, and lays out their role in protecting and preserving them. Parties to the Convention must also report regularly to the World Heritage Committee on the state of conservation of their world heritage properties.\textsuperscript{76}

UNESCO’s mission is to work with Convention Parties to safeguard World Heritage sites, provide for assistance for those sites in immediate danger, support public awareness-building activities for world heritage conservation and engage local populations in the preservation of their cultural and natural heritage.\textsuperscript{77}

PNVi was designated a World Heritage Site (WHS) in 1979. However, as a result of insecurity in the Kivu provinces in the early 1990s, in which park staff were threatened or killed and rebel groups took over large areas of land within PNVi, UNESCO placed the park on its List of World Heritage


\textsuperscript{76} UNESCO (1972) “Convention Concerning the Protection of the World Cultural and Natural Heritage”, November 16 1972

in Danger in 1994. Within five years, the DRC’s four other World Heritage Sites, all of them national parks or reserves, would also be placed on the List.

This List of World Heritage in Danger is designed to alert the international community to the active threats faced by these sites. Placing a site on the List is usually the first recourse in trying to protect it from conflict; it focuses widespread international attention on an ecosystem of global significance (and responsibility) whose survival is threatened by conflict, and hopefully mobilizes action. Once inscribed on the List, UNESCO’s World Heritage Committee must develop and adopt—in consultation with the State Party concerned—a program of corrective measures, and subsequently monitor the situation of the site.

Presently, five of the 31 sites on the List of World Heritage in Danger are found in the DRC: Garamba National Park, Kahuzi-Biéga National Park, Okapi Wildlife Reserve, Salonga National Park and PNVi. All are on the List because of threats posed by armed conflict. With 16 per cent of the world’s sites in danger, the DRC therefore has more threatened, globally important heritage areas than any other country. This should position the country as one of particular interest for UNESCO and the Convention Secretariat, and one where their energy and attention should be focused.

By the Convention’s own charter, the international community does have some responsibility in stepping in to stop this destruction. According to Swanson (1997), before the WHC, international law held that domestic resource management was the sole concern of the state concerned, the idea being that secure sovereignty and ownership rights promote investments in resources. However with the signing of the WHC, the signatories recognized the ultimate, overriding interest of global society in certain domestic resources; that is, domestic resources like PNVi, with their rich biodiversity and ecosystem services, are only domestic because it serves the entire world’s interest that they should be so. Given this, the WHC, in Article 6(1), recognizes that situations exist in which the assignment of certain resources to exclusively domestic management can break down as a management system, and then the global interest in managing those resources must be reasserted. The Article states that:

> While fully respecting the sovereignty of the States on whose territory the cultural and natural heritage…is situated, and without prejudice to the property rights provided by national legislation, the States Parties to this Convention recognize that such heritage constitutes a world heritage for whose protection it is the duty of the international community as a whole to cooperate.

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Signatory states therefore have some responsibility for the continued maintenance of these sites. Among the support offered could be funding for protection and conservation; with a designated World Heritage Site, countries become eligible for funding from the World Heritage Fund, which is made up of one per cent of member states’ UNESCO contributions. If a WHS is placed on the List of World Heritage in Danger, the World Heritage Committee can allocate immediate assistance from the World Heritage Fund to the endangered property. This possible funding can be quite helpful as efforts are made to restore the site’s values and remove it from the List as soon as possible.

While the DRC has access to this funding, which could be invested in capacity building and budgetary support for its wildlife authority, the UNESCO fund has some shortcomings: it’s very small (about US$2 million per annum) and is insufficient to provide the basis for long-term commitments for all of the important sites. So despite meeting the model of the sort of funding mechanism required for the supply of international public goods, most sites are funded on a one-time project basis, which provides little incentive for the long term conservation in PNVi. More should be done by WHC signatory states to increase the level of annual funding available.

There are other important resources under the auspices of the World Heritage Convention that are directly relevant to the crisis in PNVi. First, UNESCO has produced guidelines for reducing the impact of armed conflict on Heritage Sites. They advise that countries and wildlife authorities:

- include impact assessments of armed conflicts and opportunities for mitigation in strategic contingency planning in those regions where political instability exists or is likely to occur in future;
- maintain a conservation presence during conflicts whenever and wherever possible in protected areas and other heritage places;
- provide materials and give moral support to staff to ensure success in maintaining a presence in protected areas in armed conflict;
- collaborate with others in the conservation community and the relief and development sector to increase conservation effectiveness during conflicts; and
- work with local communities during conflicts and help them meet their needs to reduce the strain on natural resources.

Second, in response to the crisis in the DRC’s park and calls for intervention from the World Heritage Committee, in 2000 the international community launched a project aimed at safeguarding

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MEAs, Conservation and Conflict – A case study of Virunga National Park, DRC

the country’s five natural heritage sites. A four-year project, Biodiversity Conservation in Regions of Armed Conflict: Protecting World Natural Heritage in the Democratic Republic of the Congo, was a joint initiative of GTZ (German Technical Cooperation), ICCN, UNESCO and other non-governmental organizations working at these sites. It was funded by the UN Foundation and the government of Belgium.

The principal aims of the project were to re-establish the infrastructure of the sites by capacity-building; ensure the security of the working environment; and guarantee the salaries of the park staff. It also addressed immediate wildlife conservation needs, and looked to the future by promoting collaboration with indigenous communities and establishing sustainable sources of finance to support the sites in the long term.

In September 2004, an assessment of the effectiveness of the project deemed it a success. Several positive outcomes were reported, such as regular pay for park guards, the return of tourism to the area and the unified management of the parks. It was agreed that that much work was still required and a second phase of the project (2004–2008) was initiated to continue efforts to save the five sites. And while recent conflict may have reversed some of these advances, the project does set an important precedent for those working on the convention mobilizing international support for protected areas threatened by conflict.

Finally, the DRC should consider raising country-specific challenges at the governing body of the World Heritage Convention, namely the General Assembly of State Parties to the World Heritage Convention. This body meets during the sessions of the General Conference of UNESCO; of particular relevance to the DRC is the fact that this General Assembly determines the percentage of contributions to the World Heritage Fund.

**UN Convention on Biological Diversity**

The UN Convention on Biological Diversity (CBD), adopted in 1992, was the first comprehensive agreement to address all aspects of biodiversity: genetic resources, species and ecosystems. Presented at the UN Conference on Environment and Development, the CBD promotes the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

It recognizes that protecting biodiversity is “a common concern of humankind” and a crucial part of the development process. It calls for the establishment of protected areas to conserve biodiversity, while promoting environmentally sound development around these areas and in this way it directly compliments the World Heritage Convention.

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85 ibid.
Under the CBD, governments are required to develop national biodiversity strategies and action plans, and integrate them into broader national plans for environment and development. Plans are centered on key sectors, each relevant to PNVi and each impacted by conflict: forestry, agriculture, fisheries and energy. Increasingly, biodiversity conservation is being understood as a critical dimension of national security, especially where the illegal exploitation of biodiversity resources is fuelled by conflict and conversely, where the sustainable management of the resource base can be an important tool for building peace and cooperation.

A particularly important CBD commitment that is directly relevant to the challenges of environmental conflict pertains to the requirement that governments must ensure that activities within their jurisdiction or control do not cause damage to the biodiversity of other countries. Given the findings of the UN Panel of Experts (see section 3) on the international dimensions of the Great Lakes conflicts, this CBD commitment is particularly relevant to the region; any negative international impact of war on biodiversity is contrary to the Convention. Unfortunately, in reality this constraint carries little weight with belligerents.86

Field consultations indicate that the CBD is not seen as a particularly strong tool for the promotion of transboundary cooperation.87 But improved action on transboundary natural resource management in the region, supported by the Convention, could help park authorities on all sides of the border deal with some of the impacts of conflict on the various components of the shared ecosystem (fisheries, species, charcoal movements, etc.). This is spelled out in the Convention’s charter: “Each Contracting Party shall, as far as possible and as appropriate, cooperate with other Contracting Parties, directly or, where appropriate, through competent international organizations, in respect of areas beyond national jurisdiction and on other matter of mutual interest, for the conservation and sustainable use of biological diversity.”88 Collaboration on mountain gorilla conservation has been successful; expanding such cooperation to the rest of the park is the challenge—one which is potentially supported by the CBD.

There are a number of important entry points and resources under the auspices of the CBD through and with which the DRC can raise its environmental conflict challenges.

First, the UNEP World Conservation Monitoring Centre is working in collaboration with the CBD Secretariat and Contracting Parties to develop and test mechanisms for systematic assessment of the implementation of the Convention to provide a new framework for assessing implementation and identifying where further international support might be needed.89 Such an assessment of the DRC’s

87 Personal interview, Ruhengeri, August 2007
attempts to use the Convention in its protected areas would undoubtedly recommend the further integration of conflict-sensitivity to improve its implementation.

Second, CBD implementation activities undertaken by developing countries are eligible for support from the financial mechanism of the Convention, namely the Global Environment Facility (GEF). Through this facility, the DRC government could try to raise funds to support its underfunded ICCN budgets; the DRC will require considerable financial resources to enable it to meet its Biodiversity 2010 Countdown targets, namely to halt the rate of biodiversity loss, loss driven by conflict and its after-effects. The COP provides guidance to this funding mechanism, which is made possible through Article 20 of the Convention. Under this Article, developed countries undertake to provide “new and additional financial resources to enable developing country Parties to meet the agreed full incremental costs” of implementing the obligations of the Convention.

Third, the DRC should be aware of ongoing efforts undertaken by the World Heritage Centre and the CBD Secretariat to develop actions in support of the implementation of the Convention on Biological Diversity’s Programme of Work on Protected Areas (CBD PoWPA) in natural World Heritage sites. Of particular relevance for the DRC is the agreement to support the World Heritage Centre in providing training and capacity-building opportunities to World Heritage site stakeholders; this applies to PNVi’s under-trained ICCN staff.

**Convention on the Conservation of Migratory Species of Wild Animals**

Signed in Bonn in 1979, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) is concerned with the conservation of terrestrial, marine and avian migratory species and their habitats.

The DRC ratified the CMS in 1990, and the Convention is important to PNVi given the park’s position. Its birdlife is rich primarily due to the park’s position at the confluence of

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central and east African birdlife, with many migratory species either wintering in the park or stopping there during their migrations. Given the presence of contiguous national parks in Uganda and Rwanda, animals—particularly the mountain gorillas—often roam between national jurisdictions.

The CMS has an important role to play in focusing attention on endangered migratory species and is especially relevant to the DRC given its emphasis on supporting Parties to develop cooperation with other countries sharing the same migratory animals and experience similar conservation challenges. The CMS has proven itself as a vital tool for the protection of the mountain gorillas (listed in Appendix 1 of the Convention as an endangered species, and subject of the Gorilla Agreement), which are listed as Appendix 1 species, meaning that signatory countries must work to conserve and restore their habitat. Interestingly, in June 2004, then UNEP Executive Director Klaus Töpfer publically acknowledged that warfare in the Virunga region cannot be controlled by any one state, and he appealed to the Rwandan Government, as a potential new Party to the CMS, to halt forest degradation in the area and to strengthen its cooperation with the other two range states of mountain gorillas.

Under the CMS, signatories Uganda and DRC could collaborate to conserve the transboundary habitats of a number of migratory species—not just the mountain gorilla. This important role in improved regional collaboration could be raised at the Convention’s next COP; the COP plays an important role in reviewing implementation progress and in assessing the conservation status of migratory species and defining other approaches to improve conservation efforts. The next CMS COP takes place in November 2008.

It is important to highlight the role the CMS can play in catalyzing much-needed transboundary collaboration, particularly on the management and conservation of mountain gorillas and the Lake Edward ecosystem. Strong precedents have been established in the region as reflected in the number of transboundary resource management agreements negotiated between Rwanda, Uganda and the DRC. In light of the limited success that MEAs have actually had in redressing environmental degradation challenges, transboundary agreements enable the development of more coherent and concrete responses to challenges faced by a distinct “community of interests” not otherwise discernable when consensus must be reached by 192 UN member states.

Given the shared nature of the ecosystems of the Virunga landscape, the transboundary agreements negotiated under the auspices of the CMS are potentially more powerful tools to address concrete environmental challenges on the ground; the CMS can be used to support their implementation (and hopefully encouraged Rwandan ratification). Doing so will build trust and relationships across

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borders that have—in the past—been plagued by mutual suspicions. The CMS has started doing this. In 2008, the Gorilla Agreement (N’gazi Agreement) was negotiated by CMS Parties at the request of the range states and commits signatories to joint activities, programs and projects to conserve existing populations of gorillas. Some other recent agreements that the CMS could support include:

- The Goma Declaration, signed by the governments of the DRC, Rwanda and Congo in October 2005. It commits the three governments to continue their collaborative management of the protected area of the Central Albertine Rift and to coordinate efforts to reduce poverty alongside research, monitoring, community-based conservation and ecotourism to ensure sustainable biodiversity conservation. The initiative was led by the International Gorilla Conservation Programme.

- The Rubavu Declaration (July 2006) committed the governments of the DRC, Rwanda and Uganda to strengthen the tourism sector, fight poverty and conserve the biodiversity of the Greater Virunga Region. The Declaration also highlights concern regarding the impact generated by armed groups in the further displacement of local communities, as well as the destruction of infrastructure and the prevention of park rangers from entering more than 40 per cent of the Virunga Park.

- The Tripartite Ministerial Declaration on the Central Albertine Rift Transboundary Biosphere Initiative was adopted by the governments of the DRC, Uganda and Rwanda at the 3rd World Congress of Biosphere Reserves in early 2008. It established the Central Albertine Rift Valley Transboundary Biosphere Initiative to promote sustainable development pathways for the transboundary region to ensure a balanced approach to conserving the unique biodiversity of the region, while at the same time, promoting the socio-economic and cultural well-being of human communities in the region.

**UN Convention on the Illegal Trade in Endangered Species (CITES)**

The illegal trade in endangered species—worth an average of US$20 billion each year—is now the third largest contraband business in the world, after the trade in illegal drugs and weapons.
UN Convention on the Illegal Trade in Endangered Species of Wild Fauna and Flora (1973, CITES), was established to curb this trade.

In the DRC, a collapse in anti-poaching enforcement and significant increases in corruption after two decades of conflict have meant that the illegal trade in animals and products like ivory is typified by the high returns, the relative low risk of capture, and weak, if not non-existent, enforcement. While CITES has helped to raise awareness regarding the impact of the illegal trade in endangered species, it still has shortcomings, which are relevant to the DRC.

The DRC should seek support from the Secretariat in the staffing, training and equipping of national enforcement officers and authorities. It needs support in anti-poaching patrols, particularly with regard to high-value species like Lake Edward’s remaining hippo population, currently targeted for their ivory teeth. It must publicize the Convention and the species contained within its Appendices, so that the local population better understands the trade rules governing PNVi species (the trade in all primates, for example, is prohibited by CITES). The DRC should push to increase penalties for those caught in violation of the Convention, particularly with regards to ivory; not only is the park’s elephant population nearly decimated (elephants were once frequently seen traversing Lake Edward’s western coast, a migratory corridor between the north and south of the country; it has been years since a sighting), but the extinction of Lake Edward’s hippo population will likely collapse the local fishery and with it the local economy. Finally, it should lobby other signatory states to try to reduce and remove the illegal markets for animals and animal products.

CITES is now collaborating with the World Heritage Convention to address poaching problems and illegal wildlife trade affecting DRC’s five World Heritage Sites, including Virunga. This involves coordination with neighbouring countries, training for enforcement personnel and distribution of intelligence information.

The Convention on Wetlands of International Importance (The Ramsar Convention)

Adopted in 1971, the Convention on Wetlands of International Importance, also known as the Ramsar Convention, promotes the conservation and wise use of wetlands through local, regional and national actions.

and international cooperation. Under the Convention, Contracting Parties are required to designate at least one wetland at the time of accession for inclusion on the List of Wetlands of International Importance (the “Ramsar List”) and to promote its conservation. The DRC ratified Ramsar in 1996, and in that year PNVi was designated a Ramsar site.

In recent years, the Wetlands Convention has broadened its scope of implementation to cover all aspects of wetland conservation and wise use, recognizing wetlands as ecosystems that are extremely important for biodiversity conservation and for the well-being of human communities. Other commitments include bringing wetland conservation considerations into national land-use planning, establishing nature reserves in wetlands, and consulting with other Contracting Parties, especially with regard to transboundary wetlands, shared water systems and shared species.101

This last commitment is of particular relevance to the impacts of conflict on PNVi. Better consultations with Ugandan wildlife authorities during the conflict could have helped reduce the hippo poaching experienced on Lake Edward; under-staffed and under-resourced, ICCN could have used the help of their Ugandan colleagues in trying to rein in the slaughter of a keystone species central to their shared ecosystem. The same collaboration could help with monitoring the Lake Edward fishery; Congolese fishers, experiencing much lower catch loads as their fishery is depleted, have been rumoured to be entering Ugandan waters to fish there. Many do so with illegal nets. Their presence could generate grievances across the border; wetland collaboration under Ramsar could work to avoid these grievances and better preserve the transboundary wetland.

There are a number of benefits that may accrue to the DRC by virtue of its membership in the Ramsar Convention:

- opportunity to highlight its own wetland conservation concerns in the Ramsar COP;
- galvanize increased publicity for its designated wetlands and hence generate greater support for its own conservation measures; and
- obtain access to the state of the art information, technical support and advice on application of the Convention’s internationally-accepted standards, especially wetlands management planning support.102

The Ramsar Secretariat should also be lobbied to address the issue of fishing nets on Lake Edward, brought out in the first case in Section 3. Nets below the minimum size requirements are increasingly in use on the lake; their utilization means that fish below the minimum catch size are often taken out of the water, reducing the fishery’s reproductive potential. These nets are often distributed in the fisheries by international organizations working in the communities that are

unaware of laws governing the fishery. To help save the wetland, the Ramsar Secretariat should help publicize this problem among its member states and the organizations working along Lake Edward's shores.

5. Other entry points for advancing environmental conflict concerns

A number of other international and regional policy options, outside of the UN MEAs, exist for policy-makers and conservationists seeking to address the impacts of conflict on conservation. The policy tracks, organizations and other initiatives described in this section represent a fraction of what actually exists; it is beyond the scope of this report to provide an exhaustive overview, but rather an appraisal of the most promising entry points. Most entry points focus on strengthening the DRC’s institutions in the region, particularly the country’s wildlife authority, ICCN; their continued weakness in the park has to be addressed, as it serves to reinforce the legacy of conflict that has threatened PNVi’s survival for nearly two decades.

5.1 International entry points

UN Security Council Panel of Experts on the Illegal Exploitation of Natural Resources in the DRC

In 2000, the UN Security Council authorized the creation of a Panel of Experts to investigate the illegal exploitation of natural resources in the DRC. The Panel’s reports were instrumental in the adoption of UN Security Council Resolution 1457 in 2003, which strongly condemned the illegal exploitation of natural resources in the country and raised the fact that this “plunder” continued to fuel conflict in the DRC.

The Panel made a set of recommendations that continue to be relevant to the current conflict situation: arms monitoring teams, new armed forces and effective border patrols to break the cycle of illegal exploitation of natural resources, arms trafficking and conflict, as well as reforms to rebuild the DRC’s governance and institutional structures, including an overhaul of the country’s accounting and auditing systems to ensure transparent revenue flows.

Five years on, and conflict continues in the DRC. As such, the UN Security Council may want to consider re-forming the Panel of Experts to revisit the question of how natural resources are

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103 Personal interview, Vitshumbi, April 2008
contributing to the current conflict in eastern DRC, and how this conflict is affecting the environment and the local livelihoods that depend on it. Included in this assessment could be a study of how biodiversity is being impacted by conflict and what can be done to stop the environmental degradation. A new Panel of Experts would help focus the attention of the international community once again on the ongoing conflict situation in the eastern DRC and the continuing humanitarian and environmental crisis that is taking place in the region.

This new Panel could first be mandated to review the implementation of the recommendations of the earlier Panel of Experts: to what extent are these recommendations being carried out; what barriers exist, if any, to their implementation; and how they can be improved upon. Many of these recommendations remain directly relevant to the challenges present in the Kivus, particularly the strengthening of weak governance institutions to stem the tide of illegal natural resource exploitation (charcoal, hippos, fisheries, etc.); strengthening ICCN is central to the future survival of the park.

Second, the Panel should identify the specific environment and development challenges in protecting the area’s national parks from conflict. For this identification, the Panel must consider the balance that has to be struck between the survival challenges of the region’s population and the maintenance of a functioning regional ecosystem; the two are, of course, inexorably linked. As such, it is especially important for a new Panel to consult with the key stakeholders, from local communities to conservation practitioners, humanitarian relief organizations and law enforcement officials.

**UN Peacebuilding Commission**

In 2004, former UN Secretary-General Kofi Annan’s High-level Panel published a report that identified a new vision of collective security for the 21st century. The Panel’s recognition of the importance of non-military threats to security, such as environmental degradation, poverty, infectious disease and large-scale human rights abuses, has played an important role in elevating a more comprehensive understanding of security on the international political agenda. Equally relevant was the creation, following the report’s recommendation, of the UN Peacebuilding Commission (PBC).

The Commission draws on the Security Council, the UN Economic and Social Council (ECOSOC), donors and national authorities, and works closely with regional organizations and the international financial institutions to support countries emerging from conflict.\(^{106}\) Its key functions include mobilizing relevant actors to develop integrated strategies for post-conflict peace-building and recovery, and enhancing reconstruction and institution-building efforts necessary for recovery, bridging the gap between the immediate post-conflict phase and sustainable development.

The bulk of the PBC’s substantive work is being done on country-specific cases. At present, Burundi, Central African Republic, Guinea-Bissau and Sierra Leone have made formal request for advice from the PBC. It does not appear that the DRC has made a formal request to assist it in its post-conflict recovery. If the DRC would like the PBC to assist in post-conflict, peacebuilding and recovery, then it would be advised to explore this further with the PBC’s Organizational Committee. If and when an agreement is reached on the terms of its engagement, then a country-specific configuration would be established including the DRC and—where relevant—neighbouring states such as Rwanda and Uganda, as well as regional and sub-regional organizations, financial, troop and civilian police contributors, senior UN representatives in the field, and regional financial institutions. It is unlikely that the Commission would agree to engage with the DRC until a minimum degree of security has been established.

The PBC is an important entry point for the DRC—and PNVi protection—for several reasons. The PBC could play a catalytic role in bringing together all the relevant actors: local, national, regional and international civil society organizations, international donors, international financial institutions, troop contributing countries, etc. These groups could then work together to address how best to integrate environmental concerns into the larger challenges of disarmament, demobilization, repatriation, resettlement and reintegration. Widespread engagement with civil society is important to ensure that the humanitarian, development and environment consequences and impacts of the conflict are duly addressed in the reconstruction process; sustainable development will depend on collaboration between these three sectors.

Equally important in this regard is the need to support the development of rigorous environmental safeguards, as well as the judicial mechanisms needed for proper implementation and enforcement; most are non-existent in eastern DRC at the moment. PBC support for the rebuilding of ICCN’s post-conflict capacity would go a long way towards protecting the park and restoring its ecosystem.


109 Ibid.
UN Millennium Development Goals and the Johannesburg Plan of Implementation

The MDGs are a set of international quantitative targets for reducing extreme poverty in its many dimensions by 2015—income poverty, hunger, disease, exclusion, lack of infrastructure and shelter—and for promoting gender equality, education, health and environmental sustainability.

According to the UK Department for International Development, the DRC is “a long way from meeting any of the millennium development goals,” primarily because progress on poverty reduction depends to a large extent on peace and security being consolidated across DRC’s enormous territory. There is a particular deficit in the eastern DRC in the region surrounding PNVi, where conflicts continue and mortality rates exceed those in the rest of the country.

None of the MDGs contain provisions or targets on energy access. However for the DRC to meet its MDG obligations on environmental sustainability—particularly in the area around PNVi—will require a mix of new energy solutions, including: improved efficiency through better stoves and cooking methods; modern cooking fuels; sustainable, managed plantations to produce charcoal; and expanded provision of electricity and mechanical power in the area’s major demand centres (cities like Goma and Beni). Faltering attempts have been made at managing sustainable plantations for charcoal production, but they have not yet proven viable in the long-term. Without offering alternate energy sources and reducing the demand for charcoal, it will continue to be the primary source of fuel for the region, and as described in section 3, PNVi’s forests will continue to be degraded, its biodiversity threatened, rebel organizations will continue to earn significant revenues from the charcoal trade, and the DRC will likely fail—at least regionally—to meet its MDG commitment on environmental sustainability.

The Johannesburg Plan of Implementation (JPOI), adopted by over 190 governments at the 2002 World Summit on Sustainable Development, calls on the international community to: “Take joint actions and improve efforts to work together at all levels to improve access to reliable and affordable energy services for sustainable development sufficient to facilitate the achievement of the MDGs, including the goal of halving the proportion of people in poverty by 2015, and as a means to

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generate other important services that mitigate poverty, bearing in mind that access to energy facilitates the eradication of poverty.”

The UN Millennium Project, established to develop a concrete action plan for the global achievement of the MDGs, collaborated with UNDP and the World Bank to assess how best to ensure improved energy services to facilitate implementation of the MDGs. Several of the recommendations that were produced by this collaborative effort are directly relevant for the energy access challenge in the DRC generally and in PNVi more specifically. These include:

- improving the affordability, availability, and safety of cooking fuels and practices;
- enabling the use of modern cooking fuels through regulatory reforms;
- reducing the first-cost burden of kerosene stoves/cylinders;
- adopting measures to increase the sustainable production of biomass;
- improving linkages of biomass production with agriculture, agroforestry, animal husbandry, waste treatment, ecosystem services, forestry, carbon credits and income generation;
- supporting efforts to develop and adopt the use of sustainable biomass and biomass-derived fuels, improved stoves, and practices that reduce exposure to harmful emissions; and
- increasing the efficiency of conversion of biomass to biomass-derived cleaner fuels.

The DRC will require substantial resources to implement these measures. Beyond its bilateral donors, the government should seek additional technical support from “MDG Support” within UNDP. MDG Support was established in 2006 to mobilize technical support from across UNDP and the UN System to help developing country governments achieve the MDGs. MDG Support works with countries by invitation and assists them in preparing and implementing their national MDG implementation strategies. It also helps countries develop tools and methodologies to adapt the MDGs to the country-specific context, to support MDG needs assessments, build capacity and

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111 UN DESA (2002) “Johannesburg Plan of Implementation of the World Summit on Sustainable Development”, UN Department of Economic and Social Affairs, Division of Sustainable Development, New York
113 ibid.
strengthen national policies to support the Goals.\textsuperscript{114}

Furthermore, the DRC should consider developing a specific target on energy for cooking, which could be integrated within the MDGs. Such a target should focus on enabling the use of clean and safe fuels for 50 per cent of those individuals that presently use traditional charcoal for cooking. The energy for cooking target could then be raised by the DRC for integration into the NEPAD Environment Initiative (described below). If endorsed by the African Ministerial Conference on the Environment—AMCEN (the key environmental policy-making forum within Africa and the body that oversees the implementation of the NEPAD Environment Initiative), the proposal for an energy-for-cooking target could be promoted by the African Union for consideration by ECOSOC during its Annual Ministerial Review of progress made towards the MDGs.\textsuperscript{115} This annual review aims to encourage new partnerships to assist developing countries to scale-up and accelerate MDG implementation; an innovative energy-for-cooking solution brought forward by the DRC could be eligible for their support. Other entry points where a possible energy target could be raised by the DRC (if it has not already been raised by other African governments) include: the Regional Economic Communities in Africa, which are currently developing regional poverty reduction strategies consistent with the MDGs; the United Nations Economic Commission for Africa; and the UN Secretary-General’s Africa Steering Group.\textsuperscript{116}

\textbf{UN Security Council Debate on Environment and Security in Africa}

In April 2007, the UN Security Council held its first-ever open debate on the relationship between peace, security and climate change. This set an important precedent; it opened up the political space for the consideration of the environmental dimensions of conflict, an issue that many governments had tried for years to elevate onto the Security Council agenda.

Climate change itself is unlikely to be a driver of conflict in the DRC in the near future; water remains plentiful, climate-related natural disasters are infrequent and a host of other conflict drivers will undoubtedly overshadow climate change in the coming years. Nevertheless, the elevation of environment and security concerns to the Security Council presents an opportunity for a country that has now been plagued by such conflicts for two decades.

The government of the DRC is particularly well-positioned to explore the possibility of mobilizing support for an African Union resolution to call for a second debate on environment and security within the Security Council. Not only has it played witness to a host of local and regional conflicts


\footnotesize{\textsuperscript{116} ibid.}
driven by natural resources and severely impacting domestic and regional stability, but it is also home to the UN’s largest peacekeeping force, MONUC (the UN Mission in DR Congo), which operates in and around PNVi.

The debate could focus on the two-way relationship between the environment and conflict (environment as it affects and is affected by conflict), framed by the current humanitarian crisis in the eastern DRC. There are a number of issues that could be highlighted: MONUC’s mandate and achievements, and role to play in supporting conservation; continued insecurity; environmental degradation; and—of particular relevance to PNVi—access to clean water, health services, food and energy (as mentioned, most of the deaths resulting from the DRC’s conflicts have been related to treatable and preventable diseases and malnutrition, while the provision of energy sources [or lack thereof] seriously threatens the park). If these issues are not addressed, it seems more likely that grievances, rather than peace, would emerge.

By bringing this debate to the Security Council, the government of the DRC could highlight and further publicize the humanitarian crises happening within its eastern borders, and could mobilize more support for the peace process (and potentially PNVi and the region’s other at-risk protected areas, such as Kahuzi-Biéga National Park) from the UN member states.

The government of the DRC should mobilize support for this initiative from within the African Union. It can also seek support from the Council’s permanent members, particularly the United States, who has been a prominent supporter of important initiatives such as the Congo Basin Forest Partnership and the Central African Regional Programme for the Environment, and the United Kingdom, which sponsored the climate change-security debate and is a major provider of development assistance in the DRC: in 2007–08, their aid budget in the country was a significant £70 million.117 Additional support could be mobilized from among the current rotating non-permanent members, those Security Council members who are elected for two-year terms without veto power, particularly Belgium, Burkina Faso and South Africa.

**OECD DAC Guidelines on Conflict, Peace and Development Co-operation**

The 2001 DAC Guidelines on Conflict, Peace and Development Co-operation consist of a set of principles to assist the donor community in the design and creation of development cooperation for conflict prevention in post-conflict recovery. The Guidelines also provide support for minimizing the potential negative impacts of development cooperation in conflict situations.118

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While the Guidelines are primarily concerned with the role of development co-operation in post-conflict recovery, many of the specific guidelines can be applied in redressing the environmental impacts of the conflict in the eastern DRC. For example:

- the centrality of conflict prevention to both poverty reduction and sustainable development;
- the importance of engaging long-term and using a conflict-prevention “lens” in designing development cooperation policies;
- targeting assistance to help strengthen democratic systems toward the structural stability that allows for the non-violent resolution of conflicts;
- helping developing countries build legitimate and accountable systems of security; and
- integrating security system reform into efforts to strengthen good governance.\textsuperscript{119}

The Guidelines could be particularly useful for the DRC and its donors to enhance understanding of the complex relationship between conflict prevention, security and sustainable development. This is especially important in those cases where effective conflict prevention is in large part dependent on removing the drivers of environmental conflict in the region (i.e., the unabated humanitarian crisis, which is a failure of development cooperation efforts and the lack of capacity of government authorities to control insurgents).

In this light, the DAC Guidelines referring to the need for legitimate and accountable security systems are directly relevant to PNVi and North Kivu, where corruption is rife in the armed forces and there is a pressing need to strengthen government capacity to increase their presence and legitimize their role in the eyes of the local population.

The DRC should also considering approaching the DAC Network on Conflict, Peace and Development Co-operation (CPDC) for assistance in their efforts to create the necessary structures and mechanisms to manage change through more democratic and peaceful means. The CPDC network brings together representatives from the 23 OECD-DAC governments to increase and improve support to conflict-affected countries and to develop new and innovative approaches to prevent and respond to the outbreak and recurrence of violent conflict. The CPDC works in close co-operation with other DAC subsidiaries, particularly the DAC Fragile States Group and the DAC Network on Governance.\textsuperscript{120}

\textsuperscript{119} ibid.
**United Nations Environment Programme (UNEP) Post-Conflict and Disaster Management Branch**

UNEP’s Post-Conflict and Disaster Management Branch (PCDMB) conducts strategic assessments of post-conflict environmental impacts and provides concrete recommendations for strengthening environmental governance and supporting sustainable resource use. PCDMB has conducted post-conflict assessments in a number of countries, including Liberia, Sudan and Rwanda, and the organization has begun preliminary studies in the DRC, in the hopes of expanding its analysis into a full post-conflict environmental assessment in 2009.

A PCDMB mission to the DRC to scope out the potential for a post-conflict assessment highlighted in their report a number of important considerations for the future assessment, all of which address the continued impacts of conflict on PNVi:\(^{121}\):

- the situation in the PNVi remains very difficult, with the current conflict generating significant environmental impacts;
- the Ministry of the Environment needs UNEP’s support to draft new environmental legislation, reform the national environmental action plan based on a post-conflict assessment, and reform the Congolese Institute for the Conservation of Nature (ICCN);
- the environmental dimensions of human displacement must be addressed, especially in terms of the fuel needs of the refugee camps located near PNVi. Support is needed to assist the UN High Commission for Refugees to mitigate the environmental impacts of the refugee camps and explore solutions for the park-based firewood and charcoal problem;
- opportunities exist for trans-boundary environmental management (i.e. new peace parks, trans-boundary management of the illegal export of natural resources);
- any new assistance programme must assess the regional implications of environmental policy in the DRC to prevent the creation of new sources of regional conflict;
- the DRC should be a priority country for UNEP to provide environmental support, in part because of the role that natural resources have played in fueling civil and regional war and because of the importance of effective natural resource management as a critical investment for peace-building and economic development; and
- there is a pressing need to convene a stakeholder dialogue on the challenge of promoting sustainable livelihoods around Virunga, which is continually undermined by the lack of coordination and coherence between projects and programmes being delivered by humanitarian, security, development and environmental actors. (Progress has already been achieved on this front; in April 2008 a Virunga Stakeholders Meeting was convened in Goma, bringing together—for the first time—representatives from these four sectors.)

A permanent presence by UNEP in Goma and Kinshasa could do a lot to bring attention, capacity and funding to the area, to conservation and to conflict-prevention and peacebuilding. UNEP, as a neutral organization, could also use its UN standing to act as a coordinator for humanitarian, development, security and conservation organizations operating around the park. The DRC, neighbouring countries and African Union member states should all lobby for support for this initiative from other UN member states.

During the mission, UNEP met with the Ministry of the Environment, which stressed the need for UNEP to help lobby MONUC to secure the park.122 Provisions for monitoring natural resource activities have always been part of the MONUC mandate due to their role in the conflicts, but this provision has never been put into practice or enforced, mostly due to a lack of adequate resources.123 This funding deficit should be addressed by the UN Department of Peacekeeping Operations, under the recognition that the current conflict in eastern DRC, driven in part by natural resources, could destabilize the peace process throughout the country. Once more stability returns, MONUC can improve its efforts to support ICCN through joint patrols of the park and information sharing on illegal resource extraction.124

5.2 African entry points

On a regional level, there are a number of existing institutions and policy tracks within Africa that can be used by conservationists and policy-makers to bring attention and support to the protection of PNVi.

The African Union

The AU is the principal organization for the promotion of socio-economic integration across Africa. Its objectives include: achieving greater unity and solidarity among African countries and the peoples of Africa; promoting and defending common African positions on issues; encouraging international cooperation; establishing enabling conditions for the continent to play its rightful role in the global economy and in international negotiations; and promoting sustainable development and integration of African economies.125

Conservations and Congolese policymakers can make particular use of the AU’s Post Conflict and Reconstruction Policy (PCRP). The PCRP is designed to be adapted and applied to individual countries or sub-regions emerging from conflicts to assist in their reconstruction, security and

123 ibid.
124 ibid.
growth efforts. Environmental conflict is not mentioned per se in the PCRP. However the PCRP could be an important resource and entry point for the DRC, assisting the country in addressing the environmental impacts of conflict on its protected areas. Particular attention could be paid to the ways in which the region’s conflicts continue to affect the enforcement and implementation of environmental law, and the challenges this presents to law enforcement officials in PNVi and surrounding regions.

**Annual Conference of African Environment Ministers**

The African Ministerial Conference on the Environment (AMCEN) is the permanent forum of Africa’s environment ministers. AMCEN’s mandate is to promote environmental protection in Africa and to support African countries in meeting social and economic development needs. It is the highest regional policy-making body on the environment in Africa.

A particular focus of the AMCEN is directed to the implementation of multilateral environmental agreements (MEAs). However, the integration of conflict into these MEAs has not yet happened; the political declaration adopted at its 2008 Annual Conference was noticeably silent on the specific MEA implementation challenges that African countries face when they emerge from conflict. The Declaration specifically called upon African countries to participate in the various MEA-implementation capacity-building activities, including the Bali Strategic Plan for Technology Support and Capacity-Building and the European Commission MEA capacity-building programs for Africa. Both of these MEA support programs provide equally good entry points to raise the specific challenges of implementing MEAs in conflict or post-conflict situations, and the link should be made at the AMCEN level.

A number of critical conflict challenges related to PNVi could be addressed at the AMCEN Ministerial in 2009. First, attention must be directed to the serious environmental impacts of uncontrolled and often illegal extraction of natural resources that has occurred (and continues to occur) during the region’s conflicts—including the production and trade in charcoal. Second, AMCEN should address the implementation challenges specifically related to wildlife protection conventions (CITES, CMS, CBD), which are systematically undermined in the park by armed militia groups. Third, AMCEN should highlight the importance of strengthening local institutions engaged in ecosystem rehabilitation and for raising the importance of new forms of institutions needed to manage shared natural resources. The next declaration should also emphasize how strengthened governance is vital to improving stability and security in protected areas, without which it will be.

126 African Union (undated) Draft Policy Framework for Post-Conflict Reconstruction and Development (PCRD),” [link]
impossible to protect the natural resource base, increase tourism revenues and attract investment in the region.

**Action Plan of the Environment Initiative of the New Partnership for Africa’s Development (NEPAD)**

Adopted by African political leaders in 2001, NEPAD was established to stimulate Africa’s development by bridging existing gaps in priority sectors such as agriculture, health, education, infrastructure, information and communication technology, environment, tourism, science and technology, and to engage the private sector and civil society. NEPAD has been endorsed by the UN as its framework to support development in Africa.

In 2003, the African Ministerial Conference of Environment (AMCEN), in close cooperation with the NEPAD secretariat, the African Union Commission and UNEP’s Regional Office for Africa, adopted NEPAD’s first environment action plan. The key objectives of the action plan included building Africa’s capacity to implement regional and international environmental agreements. The Strategic Plan is organized around the following clusters: human resources development; public education and awareness raising; strengthening institutions and improving coordination; supporting the development of information systems and related environmental assessments; mobilizing and strengthening the role of the scientific and technical communities; and promoting South-South cooperation and sharing of experiences.128

The NEPAD Secretariat should revisit this Action Plan to evaluate how its suggestions have been used to improve MEA implementation and what barriers remain to putting the Conventions to use; as the PNVi example has shown, it is likely that conflict remains a barrier to environmental progress in many parts of the continent. The DRC, drawing from its PNVi experiences, should raise post-conflict related MEA implementation challenges at the AU Summit of Heads of State and Government, the highest authority of the NEPAD implementation process.

Specifically, the DRC could emphasize post-conflict recovery challenges as they relate to developing new policy frameworks for effective MEA implementation, as well as the development of new trans-boundary management approaches for shared ecosystems (Ramsar wetlands, migratory corridors, illegal natural resource trade) and the challenges of managing protected areas in the post-conflict reconstruction period.129

**The Congo Basin Forest Partnership (CBFP) and Congo Basin Forest Fund (CBFF)**

The Congo Basin Forest Partnership was launched at the 2002 World Summit on Sustainable Development in Johannesburg as a voluntary multi-stakeholder initiative. Supported by USAID

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funding, the CBFP involves a wide range of activities aimed at addressing the root causes of deforestation and biodiversity loss, through a network of national parks, protected areas and well-managed forestry concessions. It aims to promote economic development and poverty alleviation through assistance to communities in six Central African countries, including DRC, that depend upon forestry and wildlife resources. The CBFP also helps to address the sources of conflict over forest use by focusing on strengthening forest governance, supporting community-based management, combating illegal logging and enforcing anti-poaching laws.\textsuperscript{130} There are a number of potential opportunities for the DRC to advance its priority issues through the CBFP regular stakeholder dialogues.\textsuperscript{131}

One very interesting example of the CBFP’s relevance to environmental conflict is its recent initiative to reform zoning laws in the Ituri Forest in northeastern DRC. Specifically, it supported the strengthening of environmental governance by taking into account traditional rights, demographic realities and national reunification goals. Moreover, the project demonstrated how conservation programs can actually succeed in the midst of violent conflict so long as the key partners are committed to political and diplomatic processes that complement technical approaches, and where strategic and focused tools as well as effective strategic planning and monitoring systems are used to frame the overall approach.\textsuperscript{132}

Another very significant resource for the DRC is the newly launched Congo Basin Forest Fund (CBFF). This fund, initially financed by a grant of £100 million from the British and Norwegian governments, will provide financial support to assist local communities and institutions of the Congo Basin to improve the sustainable managements of their forest resources, assist local communities to find livelihoods that are consistent with the conservation of forests and reduce overall deforestation.\textsuperscript{133}

All of these goals are particularly salient in the PNVi region. The fund could be used to support a number of initiatives in and around the park to reduce human pressures on the ecosystems. These might include: sustainable tree plantations for firewood, construction materials and charcoal; improved cooking stoves to reduce charcoal demand and improve energy efficiency; and increasing the provision of electricity to reduce charcoal dependence. By doing so, the CBFF will slow deforestation rates and begin to facilitate the re-growth of the region’s currently-degraded forest ecosystem. In doing so, it will go some way towards the re-establishing of the park ecosystem services.

6. Conclusion

The UN MEAs are not designed or expected to offer practical solutions to conservation crises on the ground; it is up to the national governments of the signatory states, and their conservation authority, to enforce and achieve Convention goals. Their sovereignty must be respected by the other parties. However the MEAs, their COPs and their Secretariats can help them do so: by building capacity, improving information gathering (i.e., the IPCC model) and supporting underfunded budgets.

The proliferation of MEAs and protocols under them has led to a certain degree of negotiation fatigue; as such, a new protocol on Conflict and Conservation under one of the existing UN Conventions is not necessarily the answer. What is important, rather, is making the MEAs work in an actionable way on the ground. The political will to do so is there, but the practical ability to implement the conventions in states plagued by conflict remains lacking.

What can the MEAs do, and do well, as they are currently structured? They can focus attention on the crisis, and try to mobilize international support for threatened ecosystems. They can work, through COPs, to ensure better compliance among their signatories, and support those countries that are slipping in the achievement of their obligations. Finally, and perhaps most importantly, they can serve as a funding channel, so that environmental ministries can raise the funds they need to meet their commitments.

The above analysis offers a number of entry points for the DRC to address the threat that conflicts continue to present to Virunga National Park. These entry points can equally be applied to the DRC’s other protected areas and to the many other countries where violence and war threaten important ecosystems and conservation sites. Using these entry points, governments and conservationists can mobilize support for their efforts.

The timing is right to do so: the increasingly accepted link between the environment and peacemaking and development has presented conservationists with an opportunity to exert more influence in the international arena. Now they have to take advantage of it; the survival of some of the world’s most important spaces depends on it.

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# Annex 1: Conservation-relevant MEAs

<table>
<thead>
<tr>
<th>Year</th>
<th>Binding</th>
<th>DRC Ratification</th>
<th>Number of Parties</th>
<th>Objectives</th>
<th>Secretariat</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHC</td>
<td>1972</td>
<td></td>
<td>1974</td>
<td>185</td>
<td>To ensure that effective and active measures are taken for the protection, conservation and presentation of the cultural and natural heritage.</td>
</tr>
<tr>
<td>CBD</td>
<td>1992</td>
<td>1993</td>
<td>1994</td>
<td>188</td>
<td>The conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilization of genetic resources.</td>
</tr>
<tr>
<td>CMS</td>
<td>1979</td>
<td>1979</td>
<td>1990</td>
<td>108</td>
<td>Parties acknowledge the importance of migratory species being conserved and of Range States agreeing to take action to this end whenever possible and appropriate, paying special attention to migratory species with unfavourable conservation status and taking individually or in cooperation appropriate and necessary steps to conserve such species and their habitat.</td>
</tr>
<tr>
<td>CITES</td>
<td>1973</td>
<td>1975</td>
<td>1976</td>
<td>172</td>
<td>To ensure that the international trade of specimens of wild animals and plants does not threaten their survival.</td>
</tr>
<tr>
<td>Ramsar</td>
<td>1971</td>
<td>1975</td>
<td>1996</td>
<td>158</td>
<td>Provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.</td>
</tr>
</tbody>
</table>
Annex 2: International environment governance reform efforts, from 1997

The following list of global environmental governance reform initiatives was prepared by IISD in its 2006 study “Global Environmental Governance: A Reform Agenda”.

- **UN Secretary General, Renewing the United Nations (1997).** Then-Secretary General Kofi Annan placed the issue of improving the coordination and effectiveness of environmental institutions on the international political agenda in his 1997 program for reform, *Renewing the United Nations*.  

- **The Nairobi Declaration on the Role and Mandate of UNEP (1997)** restated UNEP’s role as the leading authority in the field of the environment. The Declaration was adopted by the UNEP Governing Council and endorsed by the UN General Assembly to revive UNEP and re-establish its authority, which had diminished since the creation of the Commission on Sustainable Development (CSD).

- **The UN Task Force on Environment and Human Settlements (1997)** was appointed by then Secretary General Kofi Annan to focus on inter-agency linkages and the revitalization of UNEP. The Task Force’s recommendations were adopted by the General Assembly, leading to the creation of two new coordinating bodies: the Environmental Management Group (EMG) and the Global Ministerial Environment Forum (GMEF).

- **The Inter-agency Environment Management Group (1999)** was established as a mechanism to provide UNEP with an effective and strong coordinating role within the UN system on environmental matters.

- **The Malmo Declaration (2000)** was adopted by the GMEF. It requested that the World Summit on Sustainable Development (WSSD) review the requirements for an enhanced institutional structure for GEG, including how to strengthen UNEP and broaden its financial base and how to better incorporate non-state actors into the GEG system.

- **The Cartagena Process (2000–2002)** was initiated to assess options for reforming GEG. The 21st Session of the UNEP Governing Council/Global Ministerial Environment Forum (GC/GMEF) convened the Open-Ended Intergovernmental Group of Ministers or Their...

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137 The Nairobi Declaration, available at: http://www.unep.org  
Representatives on International Environmental Governance (IGC/IEG) to assess the options for strengthening UNEP, improving the effectiveness of MEAs and improving international policy-making coherence. The report from the process was transmitted to the CSD and to the WSSD.\textsuperscript{140}

- **The Johannesburg Plan of Implementation** (2002), adopted by the WSSD, called for the full implementation of the Cartagena decision.

- **The Eighth Special Session of the UNEP Governing Council/Global Ministerial Environment Forum Jeju, Republic of Korea** met to discuss progress on the Cartagena decision.\textsuperscript{141}

- **French President, Jacques Chirac, calls for creation of a United Nations Environmental Organization (UNEO) at the UN General Assembly** (2003). In response to President Chirac’s presentation, an informal working group was set up to facilitate dialogue among governments on UNEP reform.

- **The Bali Strategic Plan for Technical Support and Capacity-building was adopted by the GC/GMEF** (2004). The Bali Plan outlined proposals for improving the capacity of developing countries and economies in transition to implement MEAs.

- **The UN Summit** (2005) called for strengthening coordination within the framework of international environmental governance and for the integration of environmental activities at the operational level into the broader sustainable development framework.\textsuperscript{142}

- **A High Level Panel on UN-wide Coherence in the Areas of Humanitarian Assistance, the Environment, and Development** (2006) was created after the World Summit in New York (2005).

In addition, a recent global environmental governance track that has been established since 2006 is the current UN General Assembly consultations on environmental governance challenges. Chaired by Enrique Berruga Filloy (UN Ambassador, Mexico) and Peter Maurer (UN Ambassador, Switzerland), the consultations have focused on five broad environmental governance challenges, all of which relate to the environment-conflict dynamic: enhanced coordination; strengthened scientific knowledge, assessment and cooperation; better treaty compliance; improved integration of environmental activities in the broader sustainable development framework; and improved capacity building.\textsuperscript{143}

\textsuperscript{140} For links to documents of Cartagena Process see: http://www.unep.org/ieg/Meetings_docs/index.asp

\textsuperscript{141} For links to documents from meeting see: http://www.unep.org/dpdl/IEG/PDF/GCSSVIII_5_K0470587.pdf

\textsuperscript{142} General Assembly Resolution (2005) *World Summit Outcome*, A/RES/60/1 24, 60th Session, para. 169

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General Assembly Resolution (2005) World Summit Outcome, A/RES/60/1 24, 60th Session, para. 169


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UNESCO (1972) “Convention Concerning the Protection of the World Cultural and Natural Heritage”, 16 November 1972


