PRESIDIUM MODEL UN CONFERENCE 2017

"Natural Resource Management and Conservation in Areas of Conflict"

UNITED NATIONS ENVIRONMENT ASSEMBLY (UNEA)

Introduction

Greetings Members,

This guide was created to serve as a starting point to your research and to give you a brief overview of the subject matter. It is important that you use this document as a reference point for more research and not as an end in itself. Another important aspect of your preparation will be to analyse your research. Don't just read documents, understand how they fit into the larger context of world events related to the agenda. I would suggest that you take notes on your research. This will help you refer to it during committee as well as understand the underlying concept better once you translate it to words you're comfortable in using.

I understand that a lot of you are first time MUNners and possibly even first time public speakers. There is no reason for you to be anxious. All of us were there at some points in our life and all of us grew bit by bit. The committee, the Executive Board as well as the organisers want to make this as comfortable an experience for you as possible. Your comfort will be a priority for us at all times. Do not hesitate at any point to approach us with your doubts. As frivolous as they might sound in your head, trust me, we had them when we were starting out as well. Your confidence will grow bit by bit as you get accustomed to your surroundings in committee. Come with an open mind, come with a willingness to observe and most importantly come with a willingness to try. I have learnt that public speaking is somewhat addictive. Give yourself that first chance and it will grow on you.

I wish you all the best and hope that we can make this an enriching experience for you.

We can be reached to address your doubts and queries at all hours, please don't hesitate in contacting any one of us (however, please e-mail and not contact on Facebook as some of us are quite inactive on social media).

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Role of Natural Resources in Conflict

Environmental factors are rarely, if ever, the sole cause of violent conflict. Ethnicity, adverse economic conditions, low levels of international trade and conflict in neighbouring countries are all significant drivers of violence. However, the exploitation of natural resources and related environmental stresses can be implicated in all phases of the conflict cycle, from contributing to the outbreak and perpetuation of violence to undermining prospects for peace. In addition, the environment can itself fall victim to conflict, as direct and indirect environmental damage, coupled with the collapse of institutions, can lead to environmental risks that threaten people's health, livelihoods and security.

There are three broad categories that issues on the subject fall under:

1. Damage to natural resources and the environment during the conflict
2. Natural resources as an aggravator of conflict
3. Natural resources as a source of funds for conflict

Damage to Natural Resources and the Environment During Conflict

The environment has always been a silent casualty of conflict. To secure a strategic advantage, demoralize local populations or subdue resistance, water wells have been polluted, crops torched, forests cut down, soils poisoned, and animals killed. In some cases, such as the draining of the Euphrates-Tigris Delta by Saddam Hussein during the 1980s and 1990s, ecosystems have also been deliberately targeted to achieve political and military goals. During the Vietnam war, the chemical that hampers growth of vegetation, Agent Orange, was sprayed over the country's forests, resulting in entire areas being stripped of all vegetation. Some of these areas remain unsuitable for any form of agricultural use even today.

Recent examples of intentional environmental damage include the 1991 Gulf War, during which Kuwait's oil wells were set on fire and millions of tonnes of crude oil were discharged into waterways. In this instance, the environment itself was used as a weapon of mass destruction. While numerous other examples of natural resources being used as a weapon of war exist, the majority of the environmental damage that occurs in times of conflict is collateral, or related to

the preparation and execution phases of wars. In this regard, impacts of conflict on the environment can be divided into three main pathways:

a) Direct impacts: are caused by the physical destruction of ecosystems and wildlife or the release of polluting and hazardous substances into the natural environment during conflict. Often presenting acute risks for human health and livelihoods, the direct impacts of conflict on the environment are the most visible and well understood. This type of impact is largely due to chemicals and debris generated by bomb damage to settlements, rural areas and infrastructure. In some situations, natural resources such as oil wells, forests and water can also be targeted. The direct effects of war are not limited to the countries in which they are waged, as air and water pollution can be carried across borders, threatening the health of populations in neighbouring regions.

b) Indirect impacts: result from the strategies used by local and displaced populations to survive the socio-economic disruption and loss of basic services caused by conflict. This often entails the exploitation of natural assets for immediate survival income, or the overuse of such resources, which can lead to long-term environmental damage.

c) Institutional impacts: Conflict causes a disruption of state institutions, initiatives, and mechanisms of policy coordination, which in turn creates space for poor management, lack of investment, illegality, and the collapse of positive environmental practices. At the same time, financial resources are diverted away from investments in public infrastructure and essential services towards military objectives.

Natural Resources as an Aggravator of Conflict

Since 1990 at least eighteen violent conflicts have been fuelled by the exploitation of natural resources. In fact, recent research suggests that over the last sixty years at least forty percent of all intrastate conflicts have a link to natural resources. Civil wars such as those in Liberia, Angola and the Democratic Republic of Congo have centred on "high-value" resources like timber, diamonds, gold, minerals and oil. Other conflicts, including those in Darfur and the Middle East, have involved control of scarce resources such as fertile land and water. As the global population continues to rise, and the demand for resources continues to grow, there is significant potential for conflicts over natural resources to intensify in the coming decades. In addition, the potential consequences of climate change for water availability, food security, prevalence of disease, coastal boundaries, and population distribution may aggravate existing tensions and generate new conflicts.

A new understanding of the contemporary challenges to peace is now being reflected in high-level policy debates and statements. The 2004 report of the UN Secretary-General's High-Level Panel on Threats, Challenges and Change highlighted the fundamental relationship between the environment, security, and social and economic development in the pursuit of global peace in the

21st century, while a historic debate at the UN Security Council in June 2007 concluded that poor management of "high-value" resources constituted a threat to peace.
Many countries currently face development challenges relating to the unsustainable use of natural resources and the allocation of natural wealth. At a basic level, tensions arise from competing demands for the available supply of natural resources. In some cases, it is a failure in governance (institutions, policies, laws) to resolve these tensions equitably that leads to specific groups being disadvantaged, and ultimately to conflict. In others, the root of the problem lies in the illegal exploitation of resources. Research indicates that natural resources and the environment contribute to the outbreak of conflict in three main ways.

First, conflicts can occur over the fair apportioning of wealth derived from "high value" resources like minerals, metals, stones, hydrocarbons and timber. The local abundance of valuable resources, combined with acute poverty or the lack of opportunity for other forms of income, creates an incentive for groups to attempt to capture them by taking control of resource-rich territories or violently hijacking the state. The potential for "high-value" natural resources to contribute to conflict is a function of global demand and depends largely on their market price.

Second, conflicts also occur over the direct use of scarce resources including land, forests, water and wildlife. These ensue when local demand for resources exceeds the available supply or when one form of resource use places pressure on other uses. This can result either from physical scarcity or from governance and distribution factors. Such situations are often compounded by demographic pressures and disasters such as drought and flooding. Unless local institutions or practices mitigate competing interests, these tensions can lead to forced migration or violent conflict at the local level.

Third, countries whose economies are dependent on the export of a narrow set of primary commodities are more likely to be politically fragile. Not only are their economic fortunes held hostage to the fluctuating price of the commodity on international markets, but it can be difficult for developing countries to add value or generate widespread employment from such exports. Moreover, governments whose revenues are generated from the export of commodities rather than from taxation tend to be alienated from the needs of their constituents.

The common trait in these three situations is the inability of weak states to resolve resource-based tensions peacefully and equitably. Indeed, conflict over natural resources and the environment is largely the reflection of a failure of governance, or a lack of capacity. As demands for resources continue to grow, this conclusion highlights the need for more effective investment in environmental and natural resource governance

Natural Resources as a Source of Funds for Conflict

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In many areas affected by war and violence, natural resources can be used to fund belligerents, non-state armed groups or members of national armies. Direct control of the exploitation (mines for example) and trade (transport, sale and relations with intermediaries and exporters) in natural resources is one of the ways these armed groups fund themselves. This supervision of all the processes to acquire such resources is often quite open in inaccessible areas, long used to the presence of armed groups and where the state has little control. In cases like Colombia, income from natural resources can also be generated from legal commercial or exploitation companies closely tied to the armed groups. This is known as "legal criminal mining". More commonly, armed group funding is based on indirect control of natural resources through illegal taxation in ore or cash imposed on miners (to get access to the mining sites) transporters (for the use of certain roads) or any other intermediary wishing to transport, buy and sell resources. In the East of the Democratic Republic of the Congo (DRC), numerous armed groups have become the de facto administrators of the area, claiming to maintain order and protect the population in exchange for a system of illegal tax on ore imposed by force and threat (anyone refusing or attempting to avoid these illegal payments runs a very high risk of physical violence). In the east of the country, violence is also perpetrated by certain soldiers of the country's regular army (Armed Forces of the DRC, FARDC) who are accused of participating in this highly lucrative mineral trade. This security and protection business is also found in Colombia. Using threats and pressure on artisanal miners and mining companies big and small, paramilitaries and guerrillas, having become "providers of security services", are managing to earn considerable sums from ore extraction and trade. In exchange for "protection" against violence from other groups and the promise to stay "inactive" (agreeing not to attack mining sites for example), the armed groups impose taxes; demanding a percentage of the resources extracted and extorting payment for mining permits that are illegal but nonetheless necessary for anyone operating in the area. In 2012, FARC (Revolutionary Armed Forces of Colombia) raised up to 20% of their income from control of the illegal mining and trade in gold. Both in Colombia and the DRC, armed groups also finance themselves through plundering and attacking mines and trade routes.

Legal Protection Granted to Natural Resources During Conflict

Despite the protection afforded by several important legal instruments, the environment continues to be the silent victim of armed conflicts worldwide. From Kosovo to Afghanistan, Sudan and the Gaza Strip, Studies have found that armed conflict causes significant harm to the environment and the communities that depend on natural resources. Direct and indirect environmental damage, coupled with the collapse of institutions, lead to environmental risks that can threaten people's health, livelihoods and security, and ultimately undermine post-conflict peacebuilding. Findings from these assessments also show that the exploitation and illegal trade of natural resources frequently fuel and prolong armed conflict, particularly in countries where laws and institutions have been weakened or have collapsed. As peacebuilding often addresses the allocation, access and ownership of natural resources, there is an urgent need to strengthen their protection during armed conflict. There can be no durable peace if the natural resources that sustain livelihoods are damaged, degraded, and destroyed. The existing international legal framework contains many provisions that either directly or indirectly protect the environment and govern the use of natural resources during armed conflict. In practice, however, these provisions have not always been effectively implemented or enforced. Where the international community has sought to hold States and individuals responsible for environmental harm caused during armed conflict, results have largely been poor, with one notable exception: holding Iraq accountable for damages caused during the 1990-1991 Gulf War, including for billions of dollars' worth of compensation for environmental damage. There are four main bodies of international law that provide protection for environment during armed conflict. These include international humanitarian law (IHL), international criminal law (ICL), international environmental law (IEL), and international human rights law (HRL).

The direct and indirect protections that IHL offers for the environment during armed conflict are of problematic value. Few IHL provisions explicitly address environmental protection during armed conflict, and those that do are inadequate. Conversely, IEL is an extensive body of law protecting the environment and provides a growing body of standards and mechanisms for addressing environmental harm – and increasingly including issues of liability – during times of peace. Whether and to what extent IEL continues to apply and provide protection during armed conflict, however, is a matter of debate.

International Humanitarian Law

IHL applies only to armed conflict and does not cover internal tensions or disturbances, such as isolated acts of violence. In addition, the law applies only after a conflict has begun, and then equally to all sides, regardless of who first engaged in the hostilities. IHL also distinguishes between international armed conflict (IAC) – in which at least two States are involved – and non-international armed conflict (NIAC), which is restricted to the territory of a single State, involving either regular armed forces and a non-governmental party, or non-governmental armed groups fighting each other. International armed conflict is subject to a wide range of rules, including those set out in the main treaties of IHL, while the laws regulating internal armed conflict are more limited. This distinction poses a significant challenge to the applicability and enforcement of IHL for environmental protection. Indeed, while IHL was largely developed in an era of interstate conflicts, the overwhelming majority of conflicts today are internal.3 Many laws are therefore inapplicable, or much less restrictive when applied to internal conflicts. Yet internal conflicts are the most strongly linked to the environment, with recent research suggesting that at least forty percent of all intrastate conflicts over the last sixty years have a link to natural resources. Another challenge is that very few provisions of IHL address environmental issues directly, as most major treaties predate the widespread concern about environmental damage generated by the Viet Nam and Gulf wars. Protection is therefore generally inferred from provisions regulating the means and methods of warfare and the impacts of armed conflict on civilian objects and properties, or recommended through non-binding or soft law, including UN resolutions.

International Environmental Law

International environmental law (IEL) covers numerous cases of environmental damage that give rise to responsibility and potential liability during times of peace. The question is whether and to what extent these liability principles may apply for similar damage resulting from armed conflict. For example, if a power station is destroyed during a war or other military operation, should the subsequent oil spill trigger the liability regime of the International Convention for the Prevention of Pollution of the Sea by Oil? Would a regional seas agreement, such as the Barcelona Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean apply, and if so, how? In another example, where rebels detonated an oil pipeline that spilled oil into a river that then spread to a neighbouring country, would the Trail Smelter Principle apply? In this scenario, would there be any practical way for the affected country to enforce IEL against the responsible internal rebel forces? Similarly, the World Heritage Convention protects sites of cultural and natural heritage, but does it apply during wartime? Would the Convention prohibit the burning of a national park containing a World Heritage site during the course of military activities? Or consider the unpermitted trade of endangered species, such as elephant ivory, that certain rebel forces have been rumoured to have engaged in to fund purchases of artillery and supplies. The Convention on the

International Trade of Endangered Species of Fauna and Flora (CITES) prohibits unpermitted trading, but has yet to be applied to insurgent forces. Could or should it be applied? And would the application depend on whether it was rebel forces or sovereign entities that were engaged in the illegal trading? The question of the potential application of IEL during armed conflict is complicated by the fact that environmental law is still maturing at both the domestic and international levels, and States are still in the process of determining how it relates to IHL (as well as other bodies of law, such as international trade law). In the place of formal actions, recent changes in the international perspective of whether IEL applies during armed conflict have occurred largely through scholarship and commentary on the subject. Since the early 1990s, many of the numerous articles that have analysed the topic have noted a shift in the historic belief that laws designed to apply during peace and the law of war were mutually exclusive, and that only one could apply at any given time. Instead, it has become widely accepted that it is not a stark choice between the two legal regimes; rather, there are areas where the two overlap, times when the law of war applies as well as some peacetime law. This view is supported by a select few international environmental agreements that specifically state that they continue to apply during times of war.

International Human Rights Law

Human Rights Law (HRL) may provide additional guidance about State conduct affecting the environment and natural resources during armed conflict. Both treaty law and customary international law contain rules that ensure that the basic social and political rights of individuals are respected, including several that have been linked to environmental protection. However, difficult questions arise when determining whether and to what extent HRL is applicable during armed conflicts. Some argue that in times of conflict, HRL is superseded and displaced by IHL, which is specifically designed for armed conflict. There has been significant difficulty in resolving this perceived incompatibility, particularly when it is unclear whether armed conflict is actually taking place. Besides, while States continue to have HRL duties, it is questionable whether non-State actors reach the level at which they would have similar HRL obligations. International legal bodies, such as the International Court of Justice (ICJ), have regularly stated that HRL continues to apply in conflict situations. In other cases, they make reference to the customary law principle of lex specialis, which states that when two bodies of law could apply in a given situation, the body of law that is more specific in its provisions displaces the other – or, at least, that the more general law should be interpreted in the light of the more specific. This would indicate that when there are divergences between IHL and HRL in conflict situations, IHL supersedes HRL as the legal framework more specifically designed for armed conflict. However, it should be noted that the lex specialis principle was specifically questioned in the ICJ DR Congo v. Uganda Case (2005), when the court applied HRL in the context of occupation, stating that both bodies of law (IHL and HRL) were relevant and would be taken into consideration.

Case Studies

This section contains short case studies on how poor natural resource management has led to conflict in certain areas:

Case Study 1: Darfur, Sudan

Sudan has been the site of armed conflict and civil unrest for more than half a century. In Darfur, recurrent drought, increasing demographic pressure, and political marginalization are among the forces that have pushed the region into a spiral of lawlessness and violence that has led to over 300,000 deaths and the displacement of more than two million people since 2003. While the causes of conflict in Darfur are many and complex, UNEP's environment and conflict analysis found that regional climate variability, water scarcity and the steady loss of fertile land are important underlying factors. The decrease in the availability of fertile land and water has been compounded by the arrival of people displaced from conflict-affected areas in southern Sudan during the civil war. Overgrazing and deforestation have reduced the vegetation cover, leading to a decrease of topsoil volume and quality. The lack of sheltering trees and vegetation has in turn undermined natural defences against shifting sands. In addition, the region has experienced a marked decline in rainfall. In northern Darfur, sixteen of the twenty driest years on record have occurred since 1972. With higher population density and growing demand for resources, recurring drought under conditions of near anarchy has fostered violent competition between agriculturalists, nomads and pastoralists in a region where some 75 percent of the population are directly dependent on natural resources for their livelihoods. With rapidly increasing human and livestock populations, the weaknesses of institutions governing access to land and water have become more apparent, and some groups have been particularly disadvantaged. Desertification and its acute form, drought, do not inevitably lead to conflict. By causing poverty, marginalization and migration however, they create the conditions that make violence an attractive option for disempowered young men. Marginalized pastoralist groups, for example, have been recruited as militias to fight proxy wars where they were able to raid cattle. Nomads, whose camel-herding livelihoods have been hard-hit by drought and desertification, have also been easy prey for armed groups in the region. As climate change may further compound water and land stresses, Darfur and indeed the entire Sahel region – recently dubbed "ground zero" for climate change – will need to place adaptation at the centre of their development and conflict prevention plans. In addition to resolving the long-standing ethnic tensions in Darfur, durable peace will indeed depend on addressing the underlying competition for water and fertile land.

Case Study 2: Sierra Leone and Liberia

In 1991, Liberian warlord Charles Taylor sponsored the invasion of Sierra Leone by the Revolutionary United Front (RUF), a rebel group whose brutal military campaign was characterized by mass amputations and systematic rape. Taylor not only provided material support to the RUF, but also sent his own troops to fight alongside them, both before and after he assumed the Liberian presidency in 1997. Taylor's support of the RUF was motivated at least in part by his desire to gain control of lucrative Sierra Leonean diamond fields less than 100 miles from the Liberian border. This interest undermined peace in Sierra Leone until 2001, and the Special Court for Sierra Leone later indicted Taylor for participating in a joint criminal enterprise "to take any actions necessary to gain and exercise political power and control over the territory of Sierra Leone, in particular the diamond mining areas." In response to the role of the diamond trade in financing Charles Taylor and the RUF, the UN Security Council imposed sanctions on diamond exports from Liberia in March 2001. This increased pressure on the RUF, which laid down arms the following year, leaving over 200,000 people dead, more than two million displaced, and thousands maimed. As an unintended side effect of the sanctions, however, Charles Taylor switched to another natural resource – Liberian timber – as his main source of revenue. Reflecting the lack of coherence in the UN's approach to natural resource-fuelled conflicts, it was another two years before sanctions were imposed on Liberian timber exports in July 2003. The following month, with his key funding source cut and rebel groups advancing on Monrovia, Charles Taylor went into exile in Nigeria. Full appreciation of the role of natural resources in the conflict in Sierra Leone also requires scrutiny of the Sierra Leonean government's own track record. In the years preceding the RUF insurgency, massive corruption in Sierra Leone's diamond sector played a more subtle but significant role in setting the stage for complete political collapse. Autocratic ruler Siaka Stevens, who was in power from 1968 to 1985, brought Sierra Leone's lucrative diamond sector under his personal control, overseeing the wholesale diversion of revenues from the state into the pockets of a few individuals. As diamond-smuggling operations overseen by Stevens' cronies skyrocketed, official exports dropped from more than two million carats in 1970 to 48,000 carats in 1988. By the end of Stevens' rule, the Sierra Leonean economy was for all intents and purposes criminalized or destroyed. The situation improved little under the rule of his successor, Joseph Momoh. This looting of the state marginalized large sections of the population, undermined the government's legitimacy and weakened its capacity to maintain peace and stability.

Case Study 3: Angola

The civil war between the government of Angola, dominated by the socialist independence movement Movimento Popular de Libertação de Angola (MPLA) and the anti-colonialist movement União Nacional para a Independência Total de Angola (UNITA), originated as a political struggle linked to the Cold War. After the end of the Cold War period however, foreign support for the warring parties began to dry up. When the first multiparty elections in the history of the country were won by the MPLA in 1992, UNITA rejected the results and resumed armed struggle. This move caused UNITA to lose most of its international support, and would probably have undermined its ability to wage war if diamonds had not sustained its military effort for almost a decade after foreign support was incrementally withdrawn. From the early 1980s onwards, UNITA established its operations in the diamond-rich north of the country and began earning revenue from taxes on the production of, and trade in, diamonds. Valued at USD 3-4 billion in the period from 1992 to 2000, the importance of the diamond trade for UNITA leadership was such that obtaining the position of Minister of Geology and Mining was a critical objective for UNITA in the 1994 Lusaka Protocol. In a virtually parallel development, the Angolan government's war effort was to a large extent dependent on oil revenues. In this respect, the civil war in Angola can be considered "the ultimate natural resource war," as the course of the conflict broadly followed the price of oil relative to diamonds. While a telling example of some of the dangers posed by natural resource riches in a country engaged in civil war, the case of Angola also illustrates how natural resource revenues render belligerents vulnerable to outside economic pressures, as UN sanctions on UNITA diamonds undoubtedly sped up the organization's downfall from the late 1990s onwards.

Case Study 4: Cambodia

In 1979, Vietnam invaded its neighbour Cambodia and overthrew Pol Pot's Khmer Rouge regime, whose four-year rule had seen around a fifth of the Cambodian population die from starvation, overwork, or execution. The Khmer Rouge regrouped along the Thai border and launched an insurgency that would last for almost two decades. The civil war between the Khmer Rouge and the Vietnamese-installed government in Phnom Penh was initially about ideology and power, and like Angola, was a proxy for Cold War antagonism. The new Vietnamese-installed government in Phnom Penh was supported financially by the Soviet Union and eastern bloc countries, while China, the United States and Thailand came out against the Vietnamese invasion. China viewed Vietnam's invasion as an unwelcome extension of Soviet influence and accused Hanoi of attempting to annex Cambodia and "set up an 'Indochina Federation' under its control." As the end of the Cold War eroded much of the Khmer Rouge's external support, the group switched its revenue-raising efforts to the exploitation of valuable natural resources under its control, principally timber and rubies. This approach was quickly emulated by Phnom Penh government forces, as political and military leaders on both sides saw an opportunity to prosecute the war while amassing personal fortunes. Logging funded military campaigns, and military campaigns soon became pretexts for more logging, with devastating human and environmental impacts. Studies estimate that the forest cover in Cambodia

decreased from 73 percent in 1969 to as low as 30 to 35 percent in 199537 from a combination of logging and slash and burn agriculture. The official policy of Cambodia's western neighbour, Thailand, was one of non-cooperation with the Khmer Rouge, and the Thai government therefore insisted that timber imported from Cambodia have a certificate of origin obtained from the Phnom Penh authorities. Surprisingly, these certificates were forthcoming, even for timber felled in Khmer Rouge territory. The Cambodian government charged loggers operating in Khmer Rouge zones a flat rate of USD 35 per cubic meter for the provision of these certificates, thus enabling their enemy to raise the funds to pursue their war effort.38 In the 1995 dry season, overland exports of timber from Khmer Rouge-held territory to Thailand were earning the Khmer Rouge leadership USD 10-20 million per month. This information was used by the NGO Global Witness to lobby successfully for a change in the US Foreign Operations Act, which thereafter stated that US assistance would not be given to any country determined to be cooperating militarily with the Khmer Rouge. The next day, Thailand closed its border with Cambodia to further imports of logs. The Khmer Rouge regional command, which controlled key forest and mineral reserves in the west of Cambodia, defected to the Phnom Penh government in August 1996. While Pol Pot and his key lieutenants continued to hold territory in the north, they were severely weakened politically and through the loss of earning capacity from natural resources. The movement went on to suffer further defections and, by the end of 1998, had disintegrated completely.

Case Study 5: Ivory Coast

Côte d'Ivoire was once the economic powerhouse of West Africa – a stable and affluent country that had avoided the descent into civil war that had plagued so many of its neighbours. In the 1970s and 1980s, it was known as the "African miracle." Yet in September 2002, an army mutiny escalated into a full-scale rebellion, resulting in the country's split between a rebel-held north and a government-held south. After several failed peace agreements, Côte d'Ivoire remains divided in a military stalemate, with the latest power-sharing agreement signed on 4 March 2007. Economic agendas on both sides are key to understanding why the conflict has proven so difficult to resolve. In September 2005, investigators discovered that diamonds mined in rebel-held Forces Nouvelles areas were being smuggled into Mali and Guinea and then onto the international market. In November 2005, the UN Panel of Experts on Côte d'Ivoire published a report detailing how the rebels were using diamonds, as well as cocoa and cotton, to fund their war effort, and for personal gain. The economic benefits gained from these natural resources, the Panel found, constituted a major disincentive to negotiate peace. In December 2005, three years after the conflict started, the Security Council extended the arms embargo against Côte d'Ivoire to include a ban on rough diamond exports from the country. Diamonds, however, were not the only source of revenue that needed to be controlled. With some 40 percent of the world's cocoa coming from Côte d'Ivoire, the commodity makes up 35 percent of the country's export earnings. In 2006, an investigation by the British NGO Global Witness uncovered evidence that the Forces Nouvelles were generating approximately USD 30 million per year by levying taxes on the cocoa trade – more than the group's estimated returns from the diamond trade. The Ivorian cocoa sector also funds military activity by the

government and government-associated militias. Indeed, the majority of cocoa plantations are situated in the government-controlled south of the country. More than USD 58 million in cocoa revenues were used for the government's war effort through the national cocoa institutions – a series of parastatal bodies mostly set up after President Laurent Gbagbo came to power in 2001. These economic interests, which benefit both parties to the power-sharing agreement, contribute to a situation in which neither side has an incentive to accelerate reunification. The resulting political foot-dragging is underscored by repeated postponement of presidential elections. While the exploitation of Côte d'Ivoire's national wealth may form an area of common interest for both sides, it is also clearly stalling genuine political reintegration.

Case Study 6: Kosovo

The 1999 conflict in the Balkans was triggered by the collapse of the Rambouillet peace negotiations, which failed to find a diplomatic solution to the Kosovo crisis. NATO initiated air strikes on targets within the Federal Republic of Yugoslavia on 24 March, suspending its campaign on 10 June. Although the conflict was relatively short, severe damage was inflicted to strategic infrastructure and industrial sites in the Former Yugoslavian Republics of Serbia and Montenegro. The industrial complex at Pancevo, one of more than 50 such sites that were bombed, was hit twelve separate times during the conflict, resulting in the release of 80,000 tonnes of burning oil into the environment. Black rain reportedly fell onto neighbouring towns and villages. In addition, a toxic cocktail of compounds and substances leaked into the air, soil and water around Pancevo, including 2,100 tonnes of ethylene dichloride (a substance causing kidney, liver and adrenal damage), eight tonnes of metallic mercury (known to cause severe birth defects and brain damage), 460 tonnes of vinyl chloride monomer (a known human carcinogen and a source of dioxins when burned), and 250 tonnes of liquid ammonia (which can cause blindness, lung disease and death). The potential environmental contamination and risks to human health were clearly very serious. Neighbouring countries – namely Bulgaria and Romania – expressed their deep concern about transboundary air pollution and the possible toxic sludge in the Danube River. While NATO argued that the environmental damage was minimized by the use of sophisticated weapons and selective targeting, the intensity of the air strikes, the targeting of industrial facilities, and the dramatic media coverage combined to raise fears that an environmental catastrophe had resulted from massive pollution of air, land and water in those countries. To address these claims, Dr. Klaus Töpfer, then Executive Director of UNEP and Acting Executive Director of UN-HABITAT, established the Balkans Task Force to undertake a neutral and independent assessment of the impact of the conflict on the environment and human settlements. A team of international experts, along with two mobile laboratories from Denmark and Germany, were deployed to investigate the purported environmental damage. The field assessment conducted by the Task Force found truth on both sides. The scientific data indicated that while the environment had indeed been contaminated, the situation could not be called an environmental catastrophe. Out of 50 bombed industrial sites, four could be classified as environmental hotspots, as the toxic chemicals released there presented serious risks to human health and required urgent clean-up on humanitarian grounds. The UNEP report also concluded that some of the contamination identified at various

sites clearly pre-dated the Kosovo conflict. This finding indicated serious industrial deficiencies in the treatment and storage of hazardous waste and pollution control that needed to be addressed as part of the reconstruction process. In addition to the urgent clean-up of the hotspots, UNEP recommended that further assessments of the potential risks caused by the use of depleted uranium weapons be conducted. UNEP's environmental assessments in the Balkans responded to a clear need to understand and address the environmental impacts of conflict. This capacity was institutionalized in 2001, with the creation of the UNEP Post-Conflict and Disaster Management Branch. In 2008, the 10th Special Session of the UNEP Governing Council endorsed the proposal that assessing and addressing the environmental causes and consequences of conflicts and disasters become one of six new strategic priorities for the organization.

Case Study 7: Afghanistan

Natural resources and environmental services underpin the livelihoods of 80 percent of Afghanistan's population. The combined pressures of warfare, civil disorder, institutional disintegration, the collapse of traditional community-based management systems, and drought have taken a major toll on Afghanistan's natural resources. Livelihoods were thrown into disarray by the conflict and resulting coping strategies have led to the widespread liquidation of the country's natural assets. In 2003, UNEP's post-conflict environmental assessment found that over 50 percent of the natural pistachio woodlands had been cut in order to sell wood for income or to stockpile fuelwood for fear that access to the forests would be lost. In some areas, the presence of landmines also drove farmers into pistachio woodlands to grow food, requiring the complete elimination of the trees. Extensive grazing and soil erosion in the former woodlands now prevent any hope of natural regeneration. As a consequence, the livelihoods that these forests once sustained by producing pistachio nuts and fuelwood for cooking and heating have been destroyed. At the same time, decreased vegetation cover and accelerated erosion have reduced water quality and quantity, further compounding existing water scarcity. Some humanitarian interventions, which provided emergency water through deep well drilling, have also exacerbated the situation. By failing to understand groundwater dynamics, coordinating activities, or monitoring extraction levels, these operations have undermined local karez water systems, placing different users in conflict over the scarce resource. With the loss of forests, water scarcity, excessive grazing and dry land cultivation, soils are exposed to erosion from wind and rain. UNEP found that the productivity of the land base was on the brink of collapse, driving people from rural to urban areas in search of food and employment – a clear case of environmentally induced displacement. As in Darfur, peace in Afghanistan will depend on rehabilitating the natural resource base and addressing tensions relating to access and tenure.

Case Study 8: The Democratic Republic of Congo

Mineral resources such as copper, gold, diamonds and coltan played a significant role in the economics of the civil war that took hold of the Democratic Republic of Congo in the past

decade, perpetuating the conflict, financing rebel groups and incentivising regional participation in what became known as "Africa's World War." As DR Congo edges towards peace, it is clear that its natural resources – timber, water and minerals in particular – could play an important part in the country's reconstruction, especially in the absence of other sources of revenue and employment. In the current context of extensive corruption, lack of government control and marginalization of local populations, however, the exploitation of the country's resources is fraught with risks. The forests of DR Congo are known as the "world's second lung." In addition to logging, they provide many livelihood opportunities, including ecotourism, conservation, agriculture and non-timber forest products such as foodstuffs, medicine or cosmetics. If logging is not carried out in a manner that is sustainable and ensures that local populations benefit from the trade, deforestation and degradation could undermine these other livelihood options, and soil erosion, increasing flood risk and declining yields could lead to competition between groups with different livelihood strategies. In addition, the risk that armed groups become involved in the timber and mineral trades, that revenues be misappropriated and that forest-dependent communities be pushed off their land also presents considerable threats to the peacebuilding process. The unrest in the Kivus, for example – the region that has been the epicentre of instability in DR Congo for a decade – has been closely linked to land and livelihood conflicts between communities. The absence of clear regulations, transparent systems and law enforcement is cited as an important reason for the lack of investment in the private forestry sector. Continuing insecurity and issues of infrastructure could also hinder the development of an ecotourism industry. Some measures have already been taken by the government of DR Congo and the international community to begin reforming the forest sector. In 2002, for example, a review of the logging concessions issued in the 1990s was announced. The process began in 2005, and by 2007, 163 of 285 reviewed concessions (covering a total of 25.5 million hectares) had been rescinded. The conversion process has suffered numerous delays and other problems, however, and has yet to be completed. In addition, while a new forest code was adopted in 2002, it is not being properly implemented, and only a handful of the 42 accompanying decrees have officially been adopted. Major information gaps remain regarding the actual quality and current usage of forests (as well as other ecosystems) in the country. The authorities do not have the means or the capacity to exercise oversight of the sector, and this lack of control has left the door open to abuse, fraud and illegal exploitation. The government will hence need continued support from the international community to monitor the environment, control natural resource extraction, and build governance and enforcement capacity.

Case Study 9: Rwanda

Rwanda provides a number of interesting lessons learned on generating revenue from natural resources at the national and community levels, and on regional cooperation for environmental management. With a history of violent conflict both between different ethnic groups and across borders, the country lies in one of the most densely populated regions of Africa and is experiencing rapidly growing demand for natural resources. In the late 1990s, the Rwandan government embarked on the parallel reform and rehabilitation of the National Parks

Management Authority, and the development of high-value mountain gorilla tourism. Today, tourists pay some USD 500 for a single gorilla permit, in addition to a similar daily amount on luxury accommodation, meals and transportation. The funds generated from the sale of the permits are used for the management of national parks, and a percentage is shared with local communities to contribute to their development. Furthermore, recognizing that regional cooperation was needed as the gorilla population also lives in protected areas in DR Congo and Uganda, the three countries signed the "Declaration of Goma" in 2005. This cooperation agreement, including joint patrols, information exchange and the sharing of revenues, represents a major achievement in the transboundary management of natural resources and demonstrates that environmental cooperation can be a useful mechanism for confidence-building. Rwanda, however, also provides an important lesson on the need for a regional approach to natural resources management. Due to widespread deforestation, the government issued a complete ban on charcoal production in 2006. While the policy may have been effectively implemented in Rwanda, the production of charcoal simply shifted to neighbouring DR Congo, further increasing extractive pressures on Virunga National Park, potentially undermining the gorilla habitat upon which local communities in Rwanda now depend for tourism revenue, and creating a shadow economy of illegal charcoal smuggling.

Case Study 10: Peru and Ecuador

The common border between Peru and Ecuador was a source of tension between the two countries for over 150 years. The last major conflict took place in 1942, when Peru invaded Ecuador, triggering a ten-day war that ended with the signing of the Rio de Janeiro protocol. The protocol established a new border between the two countries by granting Peru approximately 200,000 square kilometers of formerly Ecuadorian territory. The new border remained poorly defined, however, leading to further skirmishes and larger-scale hostilities – most notably in 1981 and 1995. After a series of prolonged discussions, the Acta Presidencial de Brasilia was signed in 1998. This agreement was unique in that it recognized the potential for fostering transboundary cooperation and reducing tension between the countries while protecting biodiversity. In particular, the treaty called for Peru and Ecuador to establish Adjacent Zones of Ecological Protection on both sides of the border in the Cordillera del Cóndor. In 1999, Ecuador established the El Cóndor park, while Peru created an Ecological Protection Zone and the Santiago-Comaina Reserved Zone. These peace parks were established as mechanisms for bilateral cooperation for conservation, as well as to promote the social, cultural and economic development of local communities in both countries. The treaty has led to subsequent binational initiatives to manage and conserve the parks such as the "Peace and Bi-national Conservation in the Cordillera del Cóndor, Ecuador-Peru" project. In addition to helping to resolve a long-term territorial dispute between the two countries, the 1998 Brasilia agreement initiated an important phase of bilateral diplomacy, cooperation and commercial relations in the post-conflict phase. Not only has the establishment of the Cordillera del Cóndor peace parks created a foundation for confidence-building and collaboration, but local communities have been building their capacity to manage the protected areas and have directly benefited from ongoing conservation efforts. Based on the experiences of the Cordillera del

Cóndor, similar parks have been proposed between Israel and Syria in the Golan Heights, as well as between North and South Korea in the demilitarized zone. These parks, it is hoped, could transform disputed border areas into transboundary conservation zones with flexible governance arrangements, facilitating cooperation between the countries involved.

Natural Resources as a means to lasting peace

Whether a war-torn society can maintain peace after a conflict ceases depends on a broad range of factors, including the conditions that led to the onset of war, the characteristics of the conflict itself, the nature of the peace settlement, and the influence of external forces (i.e. global economic or political pressures). The previous sections have shown that natural resources can be an important contributing factor in the outbreak of conflict, in financing and sustaining conflict, and in spoiling peacemaking prospects. Increasing demand for resources, population growth and environmental stresses including climate change, will likely compound these problems. At the same time, conflicts cause serious environmental impacts, which need to be addressed to protect health and livelihoods. In peacebuilding, it is therefore critical that the environmental drivers and impacts of conflict are managed, that tensions are defused, and that natural assets are used sustainably to support stability and development in the longer term. Indeed, there can be no durable peace if the natural resources that sustain livelihoods and ecosystem services are damaged, degraded or destroyed. As mentioned above, conflicts associated with natural resources are twice as likely to relapse into conflict in the first five years. Despite this, fewer than a quarter of peace negotiations aiming to resolve conflicts linked to natural resources have addressed resource management mechanisms. Furthermore, the UN has not effectively integrated environment and natural resource considerations into its peacebuilding interventions. Priorities typically lie in meeting humanitarian needs, demobilization, disarmament and reintegration, supporting elections, restoring order and the rule of law, and opening the economy to foreign investment. The environment and natural resources are often framed as issues to be addressed at a later stage. This is a mistaken approach, which fails to take into account the changing nature of the threats to national and international security. Rather, integrating these issues into peacebuilding should be considered a security imperative, as deferred action or poor choices made early on often establish unsustainable trajectories of recovery that may undermine long-term peace and stability. To ensure that environmental and natural resource issues are successfully integrated across the range of peacebuilding activities, it is critical that they are not treated in isolation, but instead form an integral part of the analyses and assessments that guide peacebuilding interventions. Indeed, it is only through a cross-cutting approach that these issues can be tackled effectively as part of peacebuilding measures to address the factors that may trigger a relapse of violence or impede the peace consolidation process. The following section provides three compelling reasons to demonstrate how environment and natural resources can concretely contribute to peacebuilding:

a) Supporting economic recovery: With the crucial provision that they are properly governed and carefully managed – "high-value" resources (such as hydrocarbons, minerals, metals, tones

and export timber) hold out the prospect of positive economic development, employment and budget revenue. The risk, however, is that the pressure to kick-start development and earn foreign exchange can lead to rapid uncontrolled exploitation of such resources at sub-optimal prices, without due attention to environmental sustainability and the equitable distribution of revenues. When the benefits are not shared, or when environmental degradation occurs as a consequence of exploitation, there is serious potential for conflict to resume.

b) Developing sustainable livelihoods: Durable peace fundamentally hinges on the development of sustainable livelihoods, the provision of basic services, and on the recovery and sound management of the natural resource base. Environmental damage caused by conflicts, coping strategies, and chronic environmental problems that undermine livelihoods must therefore be addressed from the outset. Minimizing vulnerability to natural hazards and climate change through the management of key natural resources and the introduction of appropriate technologies should also be addressed.

c) Contributing to dialogue, cooperation and confidence building:

The environment can be an effective platform or catalyst for enhancing dialogue, building confidence, exploiting shared interests and broadening cooperation between divided groups as well as within and between states.

Supporting economic recovery

Recreating a viable economy after a prolonged period of violent conflict remains one of the most difficult challenges of peacebuilding. A post-conflict state faces key policy questions on how to ensure macro-economic stability, generate employment and restore growth. It must therefore seek to immediately (re)establish systems for the management of public finances, as well as monetary and exchange rate policies. This is complicated by the fact that conflict reverses the process of development, impacting institutions, foreign investment, capital and GDP. Authorities typically need to identify quick-yielding revenue measures and priority expenditures aimed at supporting economic recovery and restoring basic infrastructure and services. In a post-conflict situation, governments are also faced with high unemployment rates that can result in social instability. Extractable natural resources are often the obvious (and only) starting point for generating rapid financial returns and employment. However, as illustrated by the cases of Sierra Leone and Liberia, the exploitation of natural resources and the division of the ensuing revenues can also create the conditions for renewed conflict. It is therefore vital that good management structures are put in place, and that accountability and transparency are ensured.

Developing sustainable livelihoods

The ability of the environment and resource base to support livelihoods, urban populations and economic recovery is a determining factor for lasting peace. In the aftermath of war, people struggle to acquire the clean water, sanitation, shelter, food and energy supplies on which they depend for their well-being and livelihoods. A failure to respond to the environmental and natural resource needs of the population as well as to provide basic services in water, waste

and energy can complicate the task of fostering peace and stability. Sustainable livelihoods approaches provide a framework for addressing poverty and vulnerability in all contexts. They have emerged from the growing realization of the need to put the poor and all aspects of their lives and means of living at the centre of development and humanitarian work, while maintaining the sustainability of natural resources for present and future generations. Collapse of livelihoods from environmental stresses, overuse of assets or poor governance results in three main coping strategies: innovation, migration and competition. Combined with other factors, the outcome of competition can be violent. For this reason, developing sustainable livelihoods should be at the core of any peacebuilding approach.

Contributing to dialogue, confidence-building and cooperation

The collapse of social cohesion and public trust in state institutions is a crippling legacy of war. Irrespective of the genesis of the violence, creating the space for, and facilitating national and local dialogue in ways that rebuild the bonds of trust, confidence and cooperation between affected parties is an immediate post-conflict task. Peacebuilding practitioners are currently discovering new or unseen pathways, linkages and processes to achieve these goals. Experience and new analysis alike suggest that the environment can be an effective platform or catalyst for enhancing dialogue, building confidence, exploiting shared interests and broadening cooperation. The approach can be applied at multiple levels, including between local social groups (across ethnic or kinship lines of conflict), between elite parties or leadership in conflict factions, and at the transnational and international levels. The premise lies in the notion that cooperative efforts to plan and manage shared natural resources can promote communication and interaction between adversaries or potential adversaries, thereby transforming insecurities and establishing mutually recognized rights and expectations. Such efforts attempt to capitalize on parties' environmental interdependence, which can serve as an incentive to communicate across contested borders or other dividing lines of tension. The shared management of water, land, forests, wildlife and protected areas are the most frequently cited examples of environmental cooperation for peacebuilding, but environmental protection (in the form of protected areas, for example) has also been used as a tool to resolve disputes over contested land or border areas. Meanwhile, constitutional processes or visioning exercises that aim to build national consensus on the parameters of a new system of governance can include environmental provisions. Issues such as the right to clean air, water and a healthy environment are often strong connecting lines between stakeholder groups with diverging interests. The need for communities to identify risks from climate change and to develop adaptation measures could also serve as an entry point. Finally, as many post-conflict states are parties to international regimes, regional political processes and multilateral environmental agreements, opportunities and support may also exist through these mechanisms

Important Documentation

1. Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law

   An inventory of relevant international law pertaining to the topic, prepared by the UNEP in 2009.

   Link: http://www.un.org/zh/events/environmentconflictday/pdfs/int_law.pdf

2. Draft Programme Document on Natural Resource Management

   This is a draft document on Natural Resource Management produced by the Afghan Government in 2009. It gives a detailed analysis of what NRM is and strategies to approach it.

   Link: http://mail.gov.af/Content/Media/Documents/NRMProgrammeDocumentReviewed1April200923920121529516553325325.pdf

3. Study Guide on Natural Resources, Conflict and Conflict Resolution

   Part of a study guide series prepared by the United States Institute for Peace (USIP). The guide carefully analyses the presented issues and presents suggestions for deeper study of the topics covered.

   Link: https://www.usip.org/sites/default/files/file/08sg.pdf

4. Natural Resource Programming in Post-Conflict Situations

   Policy brief on NRM programs prepared in collaboration by the UNEP and the Environmental Law Institute (ELI).

   Link: https://environmentalpeacebuilding.org/assets/Documents/LibraryItem_000_Doc_426.pdf

5. SC on Conflict Prevention and Natural Resources

   A 2013 Security Council report on the topic. Chronicles the background of the issue, proposes solutions and contains links to relevant documents.

   Link: http://www.securitycouncilreport.org/monthly-forecast/2013-06/conflict_prevention_and_natural_resources.php

6. Conflict Prevention through Natural Resource Management? A Comparative Study

   Working paper by GIGA, a research institute. It articulates a comparative between conflict prevention & NRM.

   Link: https://www.giga-hamburg.de/en/system/files/publications/wp158_maehler-shabafrouz-struever.pdf

7. Toolkit & Guidance for Preventing & Managing Land & Natural Resources Conflict

   Guidance note prepared by the UNEP in collaboration with other UN entities thoroughly discussing the topic area specified above.

   Link: http://www.un.org/en/land-natural-resources-conflict/pdfs/GN_Renew.pdf

8. Natural Resource Conflict Resolution

   Expert commentary on a way forward for natural resource conflict resolution by Chatham House.

   Link: https://www.chathamhouse.org/expert/comment/way-forward-natural-resource-

conflict-resolution

9. Improving Natural Resource Management in Sudan

   Report by USIP on the presented topic.

   Link:
   http://www.operationspaix.net/DATA/DOCUMENT/4735~v~Improving_Natural_Resource_Management_in_Sudan.pdf

10. A Human Rights-Based Approach to Natural Resources Governance

    Resolution on the given topic prepared by the African Commission on Human and Peoples' Rights.

    Link: http://www.achpr.org/sessions/51st/resolutions/224/

11. Women and Natural Resources in Peacebuilding

    Brief article discussing the role of women in NRM, published by UN Women.

    Link: http://www.unwomen.org/en/digital-library/publications/2013/11/women-and-natural-resources-in-peacebuilding

12. How the UN and Member States Must Do More to End Natural Resource-Fuelled Conflicts

    2010 Report by Global Witness (GW) on the given topic. GW is an international NGO that works to break the links between natural resource exploitation, conflict, poverty, corruption, and human rights abuses worldwide

    Link:
    https://www.globalwitness.org/documents/16883/lessonsunlearned

_online_low.pdf&ved=0ahUKEwi07KTump3VAhWKvI8KHT4dCFs4KBAWCC8wBw&usg=AFQjCNFQJUvVDu5SLLivytPSaoH1jKlPZw

13. Natural Resources and Conflict Management: The Case of Land

Detailed report by the UN Economic Commission on Africa published in 2012, discusses the presented topic.
Link:
https://www.uneca.org/sites/default/files/PublicationFiles/land_and_conflict_study_0.pdf