



Greening the Blue Helmets

Environment, Natural Resources
and UN Peacekeeping Operations



About UNEP's Disasters and Conflicts Programme

The United Nations Environment Programme (UNEP) seeks to minimize threats to human well-being from the environmental causes and consequences of conflicts and disasters. Through its Disasters and Conflicts programme, it conducts field based environmental assessments and strengthens national environmental and resource management capacity in countries affected by conflicts and disasters. Since 1999, UNEP has operated in more than 35 countries and published over 20 environmental assessment reports.

Based on this expertise, UNEP is providing technical assistance to a number of UN and international actors, including the Peacebuilding Support Office (PBSO), the Department of Peacekeeping Operations (DPKO), the Department of Field Support (DFS), the UN Development Programme (UNDP) and the European Commission, in assessing the role of natural resources and the environment in conflict and peacebuilding. The main objective of this technical cooperation is to help member states identify conflict risks and peacebuilding opportunities from natural resources and the environment. The aim is to promote the use of natural resources in ways that create jobs, sustain livelihoods and contribute to economic recovery and reconciliation while avoiding new forms of grievances or major environmental degradation.

About this report

This report aims to provide a comprehensive overview of how peacekeeping operations affect and are affected by natural resources and environmental conditions. The report is divided into two main parts. Part 1 reviews the environmental management of peacekeeping operations and showcases good practices, technologies and behaviours that have already been adopted. Part 2 examines the role that peacekeeping operations have played in stabilizing countries where violent conflicts have been financed by natural resources – including diamonds, gold, timber and oil – or driven by grievances over their ownership, access and control.

It has been developed by UNEP in consultation with a number of international experts and nongovernmental organizations. In particular, it draws from valuable inputs from the Swedish Defence Research Agency, the International Institute for Sustainable Development and Global Witness. In the process of conducting the analyses, extensive consultations were conducted with the Department for Peacekeeping Operations (DPKO) and the Department for Field Support (DFS) at both the field and headquarter levels.

The report is a component of ongoing technical collaboration between UNEP, DPKO and DFS, to increase the consideration given to natural resources and the environment in UN peacekeeping efforts. It has been developed in the context of UNEP's mandate to "keep under review the world environmental situation in order to ensure that emerging environmental problems of wide international significance receive appropriate and adequate consideration by governments."

This report has been open to peer review by all of the current UN peacekeeping missions as well as to a selected number of international experts, academics and non-governmental organizations. The development process for this report has also been supported by UNEP's Expert Group on Conflict and Peacebuilding. This work has been financed by the Government of Finland as a component of UNEP's Environmental Cooperation for Peacebuilding programme. This report and a separate Executive Summary are available at:

<http://www.unep.org/disastersandconflicts/>

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Greening the Blue Helmets

Environment, Natural Resources and
UN Peacekeeping Operations

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Foreword

This two-year analysis by the United Nations Environment Programme (UNEP) opens a new chapter for the UN in leading by example towards a greener and more equitable world.

It is the result of ongoing collaboration between UNEP and the UN Department of Field Support (DFS) and the UN Department of Peacekeeping Operations (DPKO) to increase the consideration given to natural resources and environmental issues in UN peacekeeping efforts.

Following violent conflict, a country's natural resources are its primary assets, which can help kick-start economic recovery, employment and livelihoods. Early decisions on how they are used, managed and allocated can have fundamental implications for short-term stability, security and peacebuilding.

While 25 percent of UN peacekeeping missions since 1948 have had a direct or indirect mandate to address natural resources, the broader issues surrounding natural resource and environmental management have until now not garnered sufficient attention within the peacekeeping community.

This report shows that peacekeeping operations not only have important natural resource implications, as well as significant impacts on the environment, but also that natural resources are often a fundamental aspect of conflict resolution, livelihoods and confidence-building at the local level.

It is therefore important that UN peacekeeping missions be given a more systematic mandate to support national authorities in restoring the administration of natural resources like diamonds, gold, oil and timber, in cases where they have fuelled or financed violence, or become militarized.

With more natural resource provisions in peace agreements today, it is also clear that there is a need for the international community – and peacekeeping operations in particular – to build new capacities and partnerships to be able to support the implementation of these provisions.

The report concludes that addressing the risks and opportunities presented by natural resources is often critical to the success of UN peacekeeping efforts and can no longer be seen as distinct from the maintenance of peace and security.

At the same time, the report also highlights the positive efforts that have been undertaken to reduce the environmental impacts of UN peacekeeping operations. By adopting creative and transformational practices, technologies and behaviours, peacekeeping missions can curtail energy and water use and waste production, and also generate significant financial savings. The improved health, safety and security of local communities and personnel, self-sufficiency of camps and reduced potential for disputes with local communities are further benefits.

The two parts of the report are inherently connected – showcasing better environmental practices and minimizing the impacts of peacekeeping operations are necessary prerequisites and form a foundation for engagement and building confidence at the community level.

With inputs from DPKO, DFS and field missions, this UNEP report is part of a broader effort to strengthen joint learning, strategic partnership and, ultimately, the UN's ability to "deliver as one" in meeting these local and global challenges. It also draws on valuable inputs from partners beyond the UN, notably the Swedish Defence Research Agency, the International Institute for Sustainable Development and Global Witness.

I hope this analysis can make a substantive contribution to a new global understanding of the interdependent and inter-linked nature of efforts to maintain peace and enable good stewardship of the environment. I look forward to working with DPKO and DFS, the UN system and member States to help take forward the recommendations contained in the report.



Achim Steiner

United Nations Under-Secretary-General
Executive Director
United Nations Environment Programme

Foreword

We are very pleased to introduce the United Nations Environment Programme (UNEP) report “Greening the Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations”. UNEP, the Department of Peacekeeping Operations (DPKO) and the Department of Field Support (DFS) have worked closely together to develop this report, capturing the work being done by peacekeeping both at headquarters and in the field. The report makes a timely contribution in two key areas: firstly, it helps us to see how we can manage the environmental impact of peacekeeping missions; and, secondly, it examines the role that peacekeeping missions have played in stabilising countries where violent conflict has been financed by natural resources.

DPKO and DFS adopted an environmental policy in 2009. The policy represents a joint commitment to reduce the environmental impact of peacekeeping operations in order to improve operational performance, and protect the health, safety and security of local communities and United Nations personnel, as well as improve the self-sufficiency of our camps.

United Nations peacekeeping missions constitute the largest environmental footprint in the UN system. Our broad-ranging mandates to keep the peace and help stabilise countries after conflict, protect civilians, promote democracy and human rights and contribute to the early stages of peacebuilding present a major challenge as we deploy over 120,000 peacekeepers to our 15 peacekeeping operations. Our operations demand extensive logistical support, deployed rapidly in countries with minimal infrastructure. How we manage our deployments and operations clearly affect local communities, economies and the environment. We are working hard to implement innovative ways to minimise our environmental footprint and to maximise our positive contributions to local communities, economies and environmental management.

We aim for United Nations peacekeeping operations to lead by example in managing environmental impact. Our partnership with UNEP is key to continuing to improve our performance, as we work together to translate our environmental policy into action on the ground.

This UNEP report identifies good practices and behaviours already emerging from the experience of peacekeeping missions. Power generation, road transport, water management, waste management, design and construction are key areas of focus to innovate and improve our environmental impact.

In Darfur, UNAMID changed its construction methods for mission buildings to soil blocks rather than bricks fired in wood-fueled kilns, thus reducing the impact on local forests. In South Sudan, UNMISS operates 39 wastewater treatments plants, generating 78,000 litres of non-potable water each day for such activities as firefighting, dust control, soil compaction and gardening. In Timor-Leste, UNMIT powers remote VHF communications repeaters with solar panels. And, in Haiti, MINUSTAH partners with the Government, local communities and UNDP to recycle shredded paper and cardboard boxes to make charcoal briquettes, both as a valuable source of fuel and as a means of reducing the deposits of waste at dumping sites. This report highlights these and many other ways peacekeeping missions are implementing innovative ideas with local and United Nations partners.

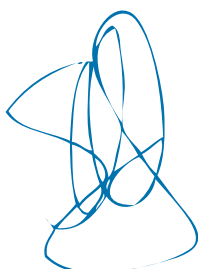
The report also shows how peacekeeping operations can help support and build national capacities for better environmental management.

The second key theme of the report is the role that peacekeeping operations play in stabilizing countries, where violent conflicts are financed by natural resources or driven by grievances over ownership, access and control of natural resources. The report shares some case studies that demonstrate how peacekeeping missions have addressed natural resource grievances as part of their conflict resolution and reconciliation activities; helped to reduce criminal exploitation of natural resources; reduced sexual violence against women by supporting fuel efficient ovens; helped to re-establish livelihoods for former combatants; and, supported UN Groups of Experts monitoring embargoes on weapons, diamonds and timber. The report demonstrates innovative approaches from peacekeeping operations in the Democratic Republic of Congo, Liberia, Côte d’Ivoire, Darfur and Lebanon as valuable experiences to set the path for the future.

The report also shows that peacekeeping support to national authorities in their management of natural resources contributes to stability and early peacebuilding outcomes, in stimulating employment and economic recovery.

We thank UNEP for this substantive and timely contribution to our efforts to continually improve our management of the environmental impact of our operations and our stewardship of natural resources. As the report shows, we have come a long way in recent years, but there is much more to do!

We remain committed to working in partnership with UNEP, national governments, regional organizations and civil society to address the report’s findings and recommendations. We are confident that the “greening the blue” initiative represents an important opportunity not only to keep the peace but to help countries move from the devastation of conflict to a stable and sustainable future.



Susana Malcorra
United Nations Under-Secretary-General
for Field Support



Hervé Ladsous
United Nations Under-Secretary-General
for Peacekeeping Operations

Introduction

Introduction

In December 2011, the UN Department of Peacekeeping Operations (DPKO) had 121,591 personnel deployed across 16 operations, including 15 peacekeeping operations, and one special political mission in Afghanistan.¹ These personnel and their supporting infrastructure contribute to the recovery and security of countries emerging from conflict, but also place considerable demands on the local environment, including natural resources. In fact, a 2008 inventory conducted by the UN Environment Management Group calculated that peacekeeping operations alone represent over 56 percent of the UN system's total climate footprint of approximately 1.75 million tons of CO₂ equivalent per year² – about the same size as the climate footprint of the city of London.

With a view to avoid and minimize the environmental impacts of peacekeeping missions, DPKO and the Department of Field Support (DFS) adopted an *Environmental Policy for UN Field Missions* in June 2009 (2009 Environmental Policy). The policy provides a series of minimum operating standards and requires each mission to adopt environmental objectives and control measures through all phases of the mission. The policy focuses on a range of issues, including water, energy, solid and hazardous wastes, wastewater, wildlife and the management of cultural and historical sites.

The objective of the policy is to decrease the overall consumption of natural resources and the production of waste, protect local environmental and public health and establish UN peacekeeping as a role model for sustainable practices. The policy also recognizes that in some cases, the adoption of sustainable approaches also improves the self-sufficiency of bases, thereby reducing dependency on external supplies as well as any potential security risks. Improved practices, technologies and behaviours can also lower the operational costs over the life of the mission. While environmental considerations had been part of individual peacekeeping missions' initiatives prior to the 2009 policy, its adoption has provided a foundation for more systematized and effective implementation. The United Nations Environment Programme (UNEP) was involved in developing the policy and is offering DPKO and DFS further technical support and expertise towards its implementation.

In addition to the 2009 Environmental Policy, a Global Field Support Strategy was approved by Member States

in 2010. While the main aim of the strategy is to improve operational efficiency and transform service delivery, one of its secondary aims is to reduce the in-country environmental impact of peacekeeping and special political missions.³ The five-year strategy has completed its second year of implementation, aimed at establishing measurement tools, improving capabilities and access to finance, and developing a modularization model to improve the speed and predictability of the deployment of the military, police and civilian components of UN peacekeeping missions, particularly in start-up or surge operations. The modules are expected to integrate parameters for waste, wastewater and water management, energy efficiency, renewable energy and low carbon technologies in newly developed camp designs.

Most recently, the annual Compact between the Special Representative of the Secretary-General or Head of Mission for Operations and the Secretary-General has included as a performance objective the need to establish an environmental management system in each mission in order to mitigate the mission's environmental impact on host countries in line with the 2009 Environmental Policy.

These initiatives come at an important time for the UN system. In October 2010, only nine months after the devastating earthquake that claimed over 220,000 lives in and around the capital Port-au-Prince, cholera appeared in Haiti for the first time in nearly a century. The epidemic led to more than 6,000 deaths and sickened approximately 300,000 people. In the weeks following the outbreak, it became a commonly held belief in Haiti that the disease strain had originated from a UN peacekeeping camp in Mirebalais, nearly 60 kilometres northeast of Port-au-Prince. This contributed to a negative perception of UN peacekeeping troops within the local population and led to violent demonstrations against them.

A thorough investigation by an Independent Panel of Experts has since concluded that the cholera outbreak was caused by a confluence of circumstances, including poor water and sanitation conditions in Haiti and the widespread use of river water for washing, bathing and drinking. According to the investigation, sanitary conditions at the UN Stabilization Mission in Haiti (MINUSTAH) camp in Mirebalais were not sufficient to prevent contamination of local waterways with human faecal waste.⁴ This incident, nevertheless, illustrates



Peacekeepers in the Democratic Republic of the Congo patrol the road between Sake and Masisi, in the mineral rich areas of North Kivu

the importance for UN peacekeeping missions to continue paying particular attention to environmental considerations when planning and managing their operations. The Secretary-General has since convened a task force within the UN system to study the findings of the Independent Panel of Experts and to ensure prompt and appropriate follow-up action to their recommendations in MINUSTAH as well as in the other missions.

The events that took place in Haiti represent just one of many future opportunities for UN peacekeeping missions to improve their practices while taking environmental considerations into account. As an input towards the implementation of these new policies and strategies, this report aims to identify good practices, technologies and behaviours that have already been adopted in peacekeeping missions together with key capability, capacity and resource constraints. The report seeks to identify lessons learned and key gaps, as well as recommend the best way to accelerate adaptation or replication of successful practices by other UN peacekeeping operations.

Apart from the impact that peacekeeping operations have on the environment, the report also addresses a second key dimension. Namely, how peacekeeping operations

and the UN Security Council can prevent natural resources from contributing to instability and conflict relapse while at the same time capitalizing on their peacebuilding potential. The report aims to demonstrate that the way natural resource risks and opportunities are addressed by the military, police and civilian components of peacekeeping missions can have an important influence on overall peace and security, and thereby on the effectiveness and impact of missions.

Addressing conflicts financed or driven by natural resources has been one of the difficult challenges faced by peacekeeping operations and the UN Security Council.^{5,6,7} Since 1948, 17 UN peacekeeping operations with a combined budget of USD 42 billion have been deployed to address conflicts with clear links to natural resources (see Table 1 and Annex 1). This budget represents half of the UN's total global expenditure to date on peacekeeping operations. However, the 17 peacekeeping missions referred to account for only 25 percent of the total number of operations over the same period. Globally, peacekeeping operations with a link to natural resources have occurred most frequently in Africa, where 13 missions have been conducted to address conflicts fuelled by natural resources, costing an estimated USD 32 billion.

Table 1: Security Council responses to conflicts linked to natural resources (1948-2011)^{8,9}

Country / UN Mission	Years	Total Budget (USD billions)	Security Council Instruments Utilized Against Specific Natural Resources		Peacekeeping Mission Directly or Indirectly Mandated to Address Natural Resources	
Angola UNAVEM (I, II, III) / MONUA	1989 – 1999	\$1.3	Sanctions, Expert panel	Diamond import ban	No mandate	
Cambodia UNAMIC / UNTAC	1991 – 1993	\$1.6	Sanctions	Logs and timber export ban	Direct mandate: Secure implementation of moratorium	Logs
Côte d'Ivoire UNOCI	2004 – ongoing	\$3.9	Sanctions, Expert panel	Diamond import ban	Indirect mandate: Exchange information with Expert Panel	
DRC MONUC/ MONUSCO	1999 – ongoing	\$11.6	Sanctions, Expert panel, Due diligence	Financing from illicit trade of natural resources	Direct mandate: Monitoring and enforcement, extend state authority, improve traceability, and prevent illicit trade	Minerals and illegally exploited natural resources
Iraq-Kuwait UNIKOM	1991 – 2003	\$0.6	Sanctions, Expert panel	Petroleum import ban	No mandate	
Liberia UNMIL	2003 – ongoing	\$5.3	Sanctions, Expert panel	Diamonds, logs, timber import ban	Direct mandate: Assist Government in restoring proper admin of natural resources	Natural resources (general)
Sierra Leone UNAMSIL	1999 – 2005	\$2.8	Sanctions, Expert panel	Rough diamond import ban	Direct mandate: Monitoring and support to police and patrols along borders	Diamond areas and border region
Sudan UNMIS	2005 – 2011	\$5.7			Indirect mandate: Support implementation of peace agreement	Land, water, oil provisions in Comprehensive Peace Agreement
Sudan, Darfur UNAMID	2007 – ongoing	\$7.9			Indirect mandate: Support implementation of peace agreement	Land, water, oil provisions in Darfur Peace Agreement
Sudan-South Sudan border, Abyei UNISFA	2011 – ongoing	\$0.2			Direct mandate: Provide security for oil infrastructure	Oil
South Sudan UNMISS	2011 – ongoing	\$0.7			Indirect mandate: Support economic development	Natural resources (general)
Timor-Leste UNTAET	1999 – 2002	\$0.4			Indirect mandate: Assist in establishment of conditions for sustainable dev.	Natural resources (general)
17 missions *		\$42 billion **				

* UNAVEM – UN Angola Verification Mission; MONUA – UN Observer Mission in Angola; UNAMIC – UN Advance Mission in Cambodia; UNTAC – UN Transitional Authority in Cambodia; UNOCI – UN Mission in Cote d'Ivoire; MONUC – UN Mission in the Democratic Republic of the Congo; MONUSCO – UN Organization Stabilization Mission in the Democratic Republic of the Congo; UNTAET – UN Transitional Administration in East Timor (Timor-Leste); UNIKOM – UN Iraq-Kuwait Observation Mission; UNMIL – UN Mission in Liberia; UNAMSIL – UN Mission in Sierra Leone; UNMIS – UN Mission in Sudan; UNAMID – UN-African Union Hybrid Mission in Darfur; UNISFA – UN Interim Security Force for Abyei; UNMISS – UN Mission in South Sudan

** The total budget of all peacekeeping operations since 1948 is USD 84 billion

Natural resources can contribute to violent conflicts in three main ways. First, conflicts can be fuelled by revenues from natural resources, especially from primary commodities such as oil, diamonds, minerals and timber.¹⁰ Civil wars, such as those in Cambodia, the Democratic Republic of the Congo (DRC), Côte d'Ivoire, Liberia and Sierra Leone have been fuelled by high-value, extractable “conflict resources” (see Box 1). Second, violent conflicts, including those in Darfur, Afghanistan and the Middle East have been linked to tensions over control of scarce resources such as fertile land and water. Finally, conflicts such as those in Bougainville and the Niger Delta have been motivated by marginalization and environmental damage in regions where the population does not see the economic benefits of natural resource extraction.

Security Council Resolution 1625 on conflict prevention recognizes these links and reasserts the Security Council's

“determination to take action against illegal exploitation and trafficking of natural resources and high-value commodities in areas where it contributes to the outbreak, escalation or continuation of armed conflict.”¹¹

The need to address natural resources as part of post-conflict peacebuilding was emphasized by the Secretary-General's 2010 *Report on Peacebuilding in the Immediate Aftermath of Conflict*. The report calls on Member States and the UN system to make questions of natural resource allocation, ownership and access an integral part of peacebuilding strategies.¹² The key challenge is to transform natural resources so that their management and use create employment, sustain livelihoods and contribute to economic recovery and reconciliation while avoiding the creation of new forms of grievance or major environmental degradation. An economy that can create peace dividends based in part on natural resources may



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Peacekeeping troops on patrol in Gbarnga, Liberia to find and destroy illegal marijuana plantations

be more robust and resistant to conflict relapse. On the other hand, an economy that perpetuates economic inequality and elite control of key resources can undermine confidence and complicate the task of building peace.^{13,14}

As peace agreements often influence the scope and mandate of peacekeeping operations, the way they address natural resources should also be taken into account. In this regard, there may be an increasing trend to include natural resource provisions. For example, in a review of 94 peace agreements concluded between 1989 and 2004, only 51 contained direct provisions on natural resources.¹⁵ However, all of the major peace agreements concluded between 2005 to 2010, included such provisions. Since 1989, land was by far the most commonly addressed resource in peace agreements, although extractive resources (oil, gas and minerals), and renewable resources (water, fisheries, forests, wildlife) are also addressed.¹⁶ This apparent trend could indicate an increasing awareness of the need to address natural resources as part of peace mediation. It certainly demonstrates the need for the international community, and peacekeeping operations in particular, to build new capacities and partnerships to support the implementation of these provisions where requested.

Box 1: Conflict resources

The phrase ‘conflict resources’ is used within the current international discourse on the links between violent conflict and natural resources. Nevertheless, there is no international consensus on what constitutes a conflict resource. Global Witness defines conflict resources as: “Natural resources whose systematic exploitation and trade in a context of conflict contribute to, benefit from or result in the commission of serious violations of human rights, violations of international humanitarian law or violations amounting to crimes under international law.”

Thus, conflict resources are not simply natural resources whose extraction or trade funds a war. A conflict resource is rather one that funds conflicts in which the laws of war are broken or human rights are violated. When the international community can agree that this is the case, action should be taken, such as through commodity-based and individual-targeted sanctions.

The lack of agreement on the universal definition of conflict resources has led to inconsistent responses by peacekeeping missions and the Security Council. Global Witness advocates that the adoption of an agreed definition by the UN Security Council may result in the following potential benefits:¹⁷

- It would allow the UN Security Council to act quickly, but without taking sides
- It would not ‘judge’ good or bad resources, only the circumstances in which they are traded
- It could be based around existing humanitarian laws and be positioned under the Responsibility to Protect
- It could trigger existing international mechanisms such as targeted sanctions, and it would not require new mechanisms or enforcement models
- A definition would act as a major deterrent to businesses operating or considering operating in conflict zones. Legitimate businesses carrying out usual due-diligence would be warned off from investing or trading in conflict zones, making enforcement unnecessary. Illicit trade would, of course, need to be tackled by existing legal mechanisms.



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Aerial view of localized flooding near Monrovia, Liberia during a reconnaissance mission by UNMIL and the Liberian National Police

Table 2: UN peacekeeping missions and occurrence of disasters linked to environmental and climatic conditions (1980-2010)

Mission	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	
Afghanistan																																
Angola																																
Bosnia Herzegovina																																
Burundi																																
Cambodia																																
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Pakistan																																
Rwanda																																
Sierra Leone																																
Somalia																																
Sudan																																
Syria																																
Tajikistan																																
Timor-Leste																																
Uganda																																

Years of peacekeeping mission are outlined with black border; years of recorded disaster events are shaded blue. Source: Peacekeeping Missions from <http://www.un.org/en/peacekeeping/list.shtml> (accessed 06-07-2011). All peacekeeping missions apart from Kosovo (due to lack of disaster data for Kosovo). Disaster data from EM-DATA (Center for Research on the Epidemiology of Disasters), Université Catholique de Louvain, Brussels (Belgium) <http://www.emdat.be/database>, accessed 06-07-2011. The following disasters were treated as environment-related: floods, droughts, landslides and mudslides, windstorms (including cyclones), heat waves and cold waves, wildfires, diarrhoeal epidemics, intestinal protozoal epidemics, viral hepatitis epidemics, and central nervous system infectious disease epidemics.



© MARCO DORMINO, MINUSTAH

MINUSTAH military personnel assist Hurricane Ike victims in Port-au-Prince, Haiti

Looking to the future, as the global population continues to rise, and the demand for resources continues to grow, there is significant potential for increased competition over the world's limited supply of natural resources. The potential for these resources to contribute to conflict is likely to increase in situations characterized by high poverty, ethnic polarization, poor governance and inequitable distribution of resources and their benefits.^{18,19} Similarly, fragile States which lack the basic capacity to provide security, basic services and justice to their citizens may also face specific challenges governing their natural resources in a transparent, equitable and sustainable manner.^{20,21} In this regard, a preliminary analysis of publicly available data on the natural resources held by the 45 fragile states listed in the 2011 report by the OECD is of interest. Some 91 percent of these countries contain either transboundary waters or biodiversity hotspots of global significance or both; 68 percent contain at least one World Heritage Site. Approximately 80 percent contain high-value resources of strategic significance to the global economy.²²

The predicted consequences of climate change for water availability, food security, disease prevalence, sea level rise and population distribution could also compound existing vulnerabilities and insecurity. Illustrating this point at the UN Security Council's first-ever debate on the impact of climate change on peace and security in 2007, the Secretary-General argued that "projected climate changes could not only have serious environmental, social and economic implications, but implications for peace and security as well. This is especially

true in vulnerable regions that face multiple stresses at the same time, pre-existing conflict, poverty and unequal access to resources, weak institutions, [and] food insecurity..."²³ During a Security Council debate on the same topic in July 2011, the Secretary-General stated that "climate change is real; it is accelerating in a dangerous manner; it not only exacerbates threats to international peace and security, [but] it is a threat to international peace and security."²⁴

In this context, the potential impact of climate change in terms of increased disaster frequency and intensity has direct relevance for peacekeeping operations and contingency planning. UN peacekeeping operations have been deployed in countries experiencing high vulnerability to environmentally related disasters. As indicated in Table 2, from 1980 to 2010, disasters relating to environmental and climatic conditions occurred in 93 percent of countries where peacekeeping missions were operating (38 out of 41). Only Libya, Namibia, and Uganda were not affected. As the incidence of climate-related disasters may rise, peacekeeping operations in coordination with Member States will need to intensify efforts to anticipate and respond to disasters that may affect the operational and security landscape. At the same time, rising tensions between livelihood groups caused by climate-induced changes in the variability or scarcity of natural resources, such as water, may also need to be addressed where they pose a threat to post-conflict stability. The potential link between natural hazards and

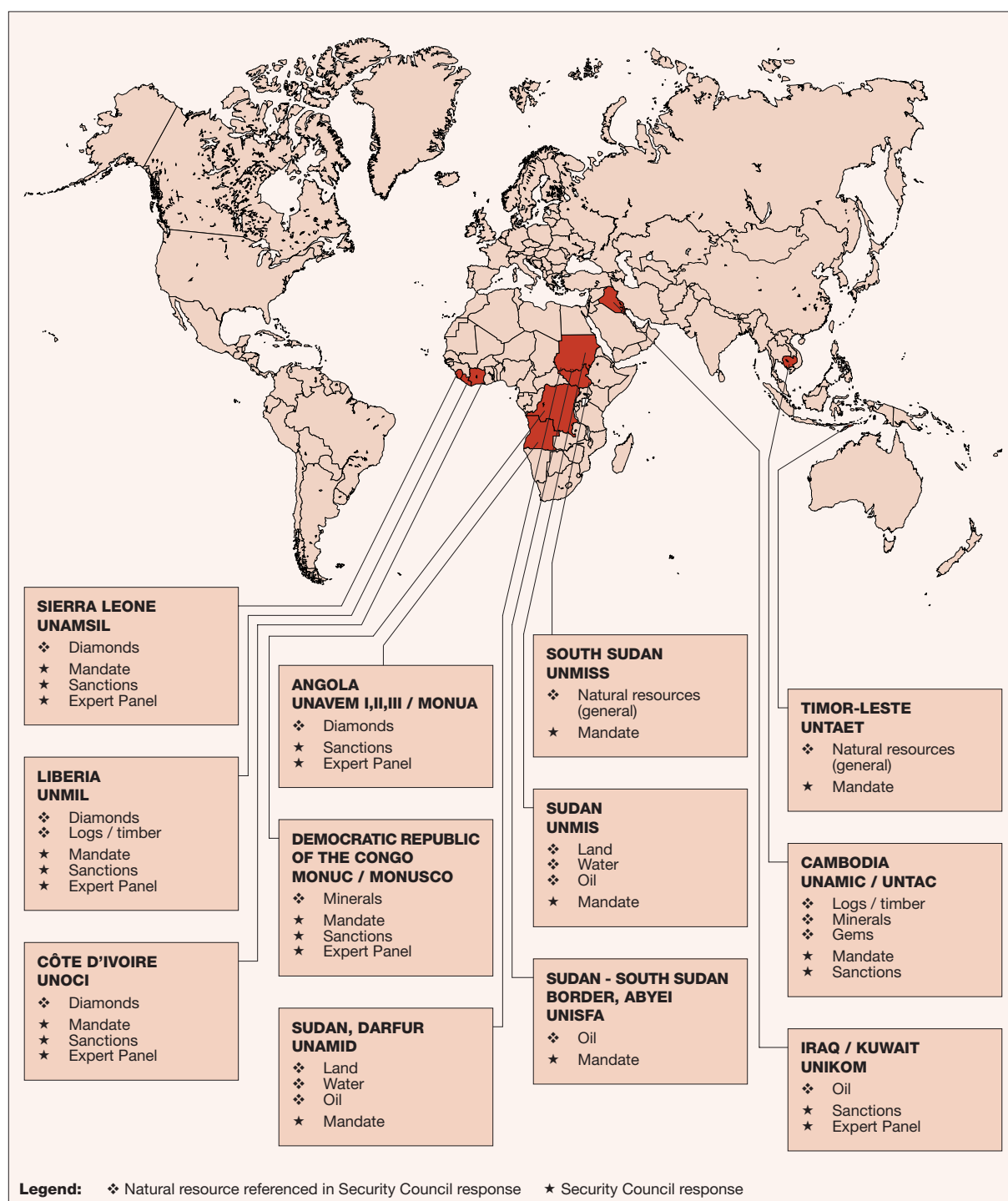
increased risk for the onset of civil war may also lead to rising demand for peacekeeping operations.²⁵

It is therefore critically important to develop a common understanding and consistent approach that accounts for the role that natural resources can play in contributing to the outbreak and maintenance of conflict, while

also incorporating strategies for how natural resource management can support the work of UN peacekeeping by underpinning stabilization, peacebuilding and livelihoods in war-torn countries.

Following this introduction, this report is divided into two parts. Part 1 reviews the environmental management

Map 1: Security Council responses to conflicts linked to natural resources (1948-2011)



of peacekeeping operations at different phases of the field mission's life-cycle: from pre-deployment planning to camp management and camp liquidation as guided by the environmental management system prescribed by the DPKO/DFS Environmental Policy.²⁶ It highlights examples of good environmental practices and procedures in the areas of water, energy and waste management that can minimize a mission's environmental impacts. It also outlines potential benefits for overall cost savings while ensuring the health, security and safety of personnel and mitigating potential conflicts with local communities. Compliance with national laws and internationally agreed Multilateral Environmental Agreements is also covered.

Part 2 examines the important and unique role that peacekeeping can play in helping to address the illegal exploitation and trade in natural resources in cases where it continues to destabilize post-conflict countries. It also evaluates the support that peacekeeping operations have provided to UN Expert Panels involved in investigating and monitoring violations of commodity sanctions that have been used by the UN Security Council to restrict financing to individuals or groups that profit from the illegal exploitation of natural resources. Part 2 also discusses how mission activities and programmes at the community level can help to address local conflicts around resources and leverage natural resources – notably water, land, agricultural commodities and minerals – to make a sustainable contribution to post-conflict community recovery, environmental rehabilitation and stabilization. In doing so, the chapter

focuses on opportunities to use natural resources in supporting emergency employment and livelihoods within Disarmament, Demobilization and Reintegration (DDR) programmes as well as in the peacebuilding, reconciliation and conflict prevention work conducted at the community level by the Civil Affairs components of peacekeeping operations.

The report concludes with actionable policy recommendations for improving the environmental performance of peacekeeping operations, as well as capitalizing on the peacebuilding potential of natural resources while minimizing their possible contribution to conflict relapse and insecurity.

This report is addressed to three main sets of actors namely: policy makers at UN agencies and Member States; peacekeeping personnel including military, police, and civilian staff and senior leadership; and DFS mission support staff, including engineers, environmental officers, logisticians and other field operators.

The broad audience exemplifies the need for environment and natural resource issues to be understood and acted upon by many personnel – not just those staff with direct responsibility for environmental issues or peacekeeping missions with an explicit mandate. It is hoped that this report will both identify good practices adopted by existing UN efforts to address environment and natural resource issues in peacekeeping operations and provide a vision for future engagement and leadership on the topic.

Part 1

Improving the environmental
management of peacekeeping
operations

PART 1 Improving the environmental management of peacekeeping operations

This part of the report examines the environmental management and impact of UN peacekeeping operations. It begins by reviewing pre-deployment planning measures that can shape the environmental performance of a mission. Secondly it examines good practices that have already emerged in five areas of camp management addressed by the 2009 Environmental Policy: water, energy, solid and hazardous wastes, wastewater, wildlife and the management of cultural and historical sites. Finally, it addresses the main environmental considerations in camp closure and liquidation.

Part 1 focuses on demonstrated, practical and cost-effective practices, technologies and behaviours that can be applied to peacekeeping operations in remote locations under difficult operating conditions with staff from a variety of countries and cultures. Some of the technologies can be procured before deployment and integrated into training, maintenance schedules and budgets. Others can be retrofitted into existing missions. Some measures apply to the actions of personnel and some to equipment, vehicles and infrastructure. Country and site-specific factors – including staff numbers and turnover and the capabilities and expertise of international and local personnel – require that some practices, technologies and behaviours be applied in a tailored manner. In addition, some technologies require additional capabilities and training while others are not feasible today but remain possible future considerations.

It is important to note that the efforts canvassed in this section have been motivated by a combination of factors and benefits to be gained. In addition to implementing the environmental policy, some missions realized that reducing their environmental impact also protects the health and safety of staff and local communities and reduces conflicts with host communities. Others have attempted to improve their environmental performance as a component of due diligence and efforts to limit legal liability and compensation exposure for any potential environmental damage. Still others have been motivated by the desire to increase self-sufficiency and on-site energy production in order to reduce dependency on vulnerable supply lines. Regardless of the motivation, these efforts have served to reduce the environmental footprint of the operation and can be considered good practices for adoption in other missions.

To date, however, the environmentally sustainable practices and technologies that have been applied in the field are

the exception to the rule with no systematic application or sharing of lessons learned across peacekeeping missions. The 2009 Environmental Policy articulates a chain of command for addressing the environmental impact of peacekeeping missions and adopting resource efficient practices (see Box 2). While the policy states that the Director of Mission Support is responsible for taking “actions to integrate environmental measures into planning and operations in order to avoid and minimize the impact of activities carried out by the mission and its staff on the environment”, this has not been done on a comprehensive basis.²⁷ Rather, the 2009 Environmental Policy remains a guidance document, as Member States have not yet provided a clear mandate facilitating its requisite implementation. However, recent discussions in various committees of the General Assembly have indicated positive movement on this matter.^{28,29} The following sections highlight some of the good practices that have been identified.

Pre-deployment planning and initial analysis

Pre-deployment planning provides the best and the most cost effective opportunity to consider environmental management options and entrenched sustainable practices for use over the life of the mission. Pre-deployment planning includes conducting environmental reviews and documenting the existing environmental conditions, incorporating environmental provisions in Standard Operating Procedures, tailoring camp design, construction and procurement specifications to local conditions and training staff. This study found that good practice is emerging in each of these domains.

Environmental reviews

Assessments and planning before deployment can help forecast and mitigate the environmental impacts of a peacekeeping mission as well as identify environmentally inappropriate sites that could complicate base operations and increase costs. An Environmental Impact Assessment (EIA) assesses the possible positive or negative impacts of a peacekeeping base on the environment, encompassing natural, social and economic aspects. An EIA can identify possible environmental impacts, plan mitigating

Box 2: The “green hierarchy”: Environmental responsibility at UN peacekeeping missions³⁰

As outlined in the 2009 Environmental Policy, the chain of command for environmental responsibility in UN peacekeeping missions is:

1. The DPKO and DFS Under-Secretary-Generals for Peacekeeping Operations and Field Support are responsible for taking measures to ensure that all field missions integrate environmental considerations into their respective operations and endeavour to secure resources required for this purpose.
2. The Head of Mission, which could be either the Special Representative of the Secretary-General or the Force Commander, is responsible for promulgating the environmental policy objectives of the field mission and issuing annual mission environmental statements.
3. The Director/Chief of Mission Support is responsible for the mission compliance with the Environmental Policy, including establishing instructions and operating procedures to implement the mission’s environmental objectives.
4. The Force Commander is responsible for instituting instructions and operating procedures to ensure that the military component complies with the environmental policy and objectives of the mission.
5. The Head of the Police Component of the mission is responsible for instituting instructions and operating procedures to ensure that the police component complies with the Environmental Policy and objectives of the mission.
6. The Environmental Officer is responsible for coordinating the management of actions on environmental issues in the mission. This includes establishment of the mission’s Environmental Management System by supporting the development and drafting of mission’s environmental policy and objectives, undertaking environmental surveys and assessments, producing an Environmental Baseline Study (EBS) and an action plan, advising and providing information on environmental issues, establishing a list of potentially hazardous installations, liaising with local authorities, investigating claims, recommending measures to mitigate environmental problems, keeping records, regular reporting and briefing of peacekeepers during their induction.

Environmental issues at the mission will normally be subject to national laws and regulations governing the environment and natural resources. Where there is a lack of relevant laws and regulations, the international obligations under international environmental treaties to which the host country is a party will provide the standards of conduct with which the mission will need to comply.

measures and help ensure that operations are conducted in an environmentally sustainable manner. An EIA ideally should also incorporate local concerns and knowledge through consultations with communities near the site of the planned camp.

The Swedish Defence Research Agency (FOI), DFS and UNEP have been developing EIA methodologies for UN peacekeeping operations. A field level EIA pilot study was conducted in 2010 at a planned UNSOA base in Mombasa while a remote EIA, using Geographic Information System (GIS) and remotely sensed data, was conducted for Mogadishu due to security constraints (see Case Study 1). Potential risks to sensitive groundwater aquifers from chemicals used by the mission combined with waste management practices were highlighted in both studies. This required the development of a long-term waste management strategy to protect water supplies for the mission and the local population. But conducting EIAs is more the exception than the rule. It is hoped the pilot efforts undertaken in Mombasa and Mogadishu can be replicated in other missions and become a model of best practice. It should be acknowledged that existing EIA tools need to be further developed to streamline the EIA process to avoid delaying the deployment of peacekeeping contingents.

When carried out alongside an EIA, an Environmental Baseline Study (EBS) ensures that pre-existing environmental conditions are documented prior to the start of

mission operations and following mission closure. The objective of this due diligence practice is to limit UN liability for pre-existing environmental damage and allow a mission to monitor its environmental performance as required by the 2009 Environmental Policy. An EBS should also be used as one of the site selection tools. Potentially unsafe or unsuitable environmental conditions, such as high flood risk or proximity to pollution sources, should result in selection of a different site.

Furthermore, while an EBS may help identify potential health risks to mission personnel and the local community, its primary focus is environmental protection and its scope does not allow for a comprehensive health risk analysis. For this purpose, a separate Environmental Health Site Assessment (EHSA) must be carried out. It is good practice to coordinate these two surveys as they have several common areas, such as pollution or legal framework.

Two cases with different outcomes from Bosnia and Herzegovina show the value of conducting an EBS. First, Finnish forces at Camp Eagle Base in Tuzla, Bosnia-Herzegovina conducted an EBS together with an EHSA when they took over operations within their mission in support of the European Union in 2004. Tuzla is a mining town with a coal-fired power plant and an industrial chlorine factory. The combined EBS/EHSA effort informed decision makers of the potential health risks

Case study 1: Environmental baseline studies in Kenya and Somalia



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An Environmental Baseline Study was conducted in Mombasa, Kenya on the potential site of the UNSOA logistics base

UNSOA commissioned the first EBS conducted in the context of an African Union peacekeeping operation supported by the UN. The purpose of the EBS was to assess the environmental status of two possible sites near Mombasa where UNSOA envisaged installing its logistics base. A secondary objective was to document the environmental status of the site prior to UN installation, as a component of due diligence and in case any future claims of environmental damage were made by the host country or local communities. One of the sites assessed was located in an industrial area in Mombasa, while the other was close to the International Airport.

This EBS, conducted in August 2010, was a collaborative effort by DFS, UNSOA, UNEP and the Swedish Defence Research Agency. Water, sediment and soil samples were analysed for heavy metals, volatile organic compounds (VOCs), cyanide and other potentially harmful contaminants. In the absence of applicable local standards, the results were compared to contamination guidelines used by Sweden's Environmental Protection Agency.

Neither of the proposed sites showed alarming levels of the analysed contaminants; however, as anticipated, there were higher levels of pollution, such as heavy metals and VOCs, in the existing industrial area. In addition, both sites were found to be located near sensitive marine ecosystems and groundwater aquifers that supplied local communities. This required the development of a long-term waste management strategy to protect water supplies for the mission and the local population.

Additionally, an EBS was undertaken remotely for an UNSOA base in Mogadishu, due to security reasons. The assessment team conducted interviews, used GIS technology and desk studies, which provided a good overview of the situation. While collection of samples is preferable, this example also demonstrates that a basic environmental baseline survey can be developed remotely before deployment of a mission.

faced by Finnish troops at Camp Eagle. It also provided documentation to reduce the risk of any potential legal action stemming from alleged environmental damage following the departure of the Finnish troops. The base was handed over to Austrian forces after 12 months and then to Greek forces after a further 12 months. At each handover an EBS was carried out. When the base was eventually handed over to the host nation in July 2007 there were no complaints or legal action regarding environmental pollution.

In another case, the Canadian government was forced to pay USD 1 million for the remediation of 2800 m³ of petroleum-contaminated soil to the Government of Bosnia and Herzegovina following its contribution to the UN Protection Force (UNPROFOR).³¹ While the contamination might have existed prior to the deployment of the peacekeeping operation, this could not be demonstrated in the absence of an environmental baseline study and proper due diligence.

Design, construction and procurement

Pre-deployment decisions on the design and construction of buildings and infrastructure are a major determinant of a mission's environmental impact. Early considerations of passive design strategies such as building location, orientation, layout, window design, insulation, thermal mass, shading and ventilation offer a unique opportunity to utilise local climatic and site conditions to maximise building users' comfort and health while minimising energy use. The Global Field Support Strategy is developing a standard modularization model which, in addition to transforming service delivery to field missions, will improve the management of energy, water and waste in camps.

The construction of UN peacekeeping compounds and bases can create a high demand for some natural resources leading to environmental degradation or pollution.

Case study 2: Using soil blocks to reduce deforestation pressure in Darfur and South Sudan

The potential importance of minimizing the environmental impact of the construction of new facilities is highlighted by the lessons learned from UNAMID and humanitarian organizations in Darfur. Between 2004 and 2008, brick production increased dramatically for the construction of international compounds, including those of UNAMID. The bricks were fired in kilns fuelled by wood from surrounding forests. A UNEP study found that increased wood consumption to meet demands for the peacekeeping and relief communities in Darfur equated to approximately 52,000 trees lost per year.³² Deforestation was not only increasing environmental degradation but also becoming a source of tension with local communities.

One solution of emerging good practice was to replace the bricks with soil blocks. These alternative materials were produced with hydraulically compressed clay, silt and cement and found to be less impactful on the environment. The blocks do not use timber-fired kilns and their manufacture requires 30 percent less water than traditional bricks. In South Sudan, ex-combatants were employed on a pilot basis to construct some of the new UN houses with the soil blocks – a potential win-win situation, creating employment for ex-combatants while reducing environmental impacts. The use of soil blocks have been adopted by UNMISS as well as other humanitarian actors working in the region.



Soil blocks have been used to build houses such as this one at an UNMISS base in Juba, South Sudan, based on good practice from Darfur

Minimum security standards, for example, require two-metre high compound walls that can generate significant demand for bricks and timber. The 2009 Environmental Policy states: “offices or residential buildings, if newly constructed, are built in a manner minimizing the impact on the environment.”³³ Lessons learned by UNAMID and humanitarian organizations in Darfur offer an example of both the severe negative impact that construction can have on the local environment and the importance of considering alternative construction materials in alleviating those impacts and providing a positive change (see Case Study 2).

Procurement is also a critical step in pre-deployment planning. Procurement transactions for UN peacekeeping operations totalled USD 2.4 billion in 2010.³⁴ Many Member States are interested in exploring options for significant savings through the introduction of resource efficient practices and products with lower life cycle costs. UNEP has worked with different UN agencies to develop best practice guidelines for the procurement and use of environmentally sustainable products across 10 categories of goods, civil works and services.³⁵ However, some Member States also resist the idea that peacekeeping operations should acquire more environmentally sustainable equipment as upfront capital costs may be higher.

Procurement reform can also be problematic for troop-contributing countries and developing nations, as it may be difficult to apply high environmental standards to some equipment, due to the varying capabilities of troop-contributing countries. Indeed, many troop-contributing countries bring their own equipment (known as contingent-owned equipment) – often to use before a base camp is established – and have particular agreements for equipment with the UN. Some developing countries also resist procurement reforms on business grounds, considering any preference for products with environmental standards as a potential risk and barrier for their domestic industries. This resistance is mainly based on the perception that resource efficient technologies are always more costly and employ complex technologies, despite the fact that many efficiency measures are low technology with significantly lower life cycle costs and are readily manufactured across developed and developing countries alike.³⁶

Staff and training

Staff resources and training can improve the environmental management of a mission by providing leadership, capacity and expertise in the field. Many positions in a mission have environmental responsibilities (see Box 2) – although this can cause a diffusion of accountability in some instances. Only seven missions have at least one full-time environmental officer: MINUSTAH (Haiti), MONUSCO³⁷ (DRC), UNOCI (Côte d’Ivoire), UNIFIL (Lebanon), UNMIL (Liberia), UNAMID (Darfur) and UNMISS³⁸ (South Sudan). Furthermore, only UNAMID has environmental officers on both the field support and substantive sides.³⁹ Most other missions have environmental focal points, but these often lack appropriate environmental expertise, or dedicated time to perform these additional duties. In addition, many of these officer and focal point positions are inadequately

resourced and some lack the authority or capacity to ensure the 2009 Environmental Policy is properly implemented. Finally, limited awareness of contemporary environmental concepts such as passive design, resource efficiency or climate change across all levels of peacekeeping staff may further hinder the effective implementation of the policy.

With a view to fostering a harmonized approach to implementing the policy, DFS headquarters uses knowledge management tools, such as an online “communities of practice”. However, current staffing dedicated to the environment at headquarters⁴⁰ is insufficient to provide more of the tools and guidelines that missions greatly need.

In regard to training, there is currently no systematic and comprehensive pre-deployment training on natural resources and the environment for UN peacekeeping personnel. Troop turnover on a six-month or annual basis can also inhibit the adoption of better practices over the life of the mission and the transfer of environmental knowledge. However, some training has taken place on an ad hoc basis: an environmental awareness course for UN field engineers was held in the UN Logistic Base in Brindisi, and two trial environmental training sessions were conducted for UNMIS staff in 2008. An environmental awareness training day was also conducted in December 2009 for military and civilian personnel from MONUSCO. Also, MONUSCO’s environmental unit conducted a training campaign across all mission components during 2011 (see Case Study 3). Similarly, MINUSTAH Environmental Compliance Unit briefs every contingent at their arrival, as well as civilian staff during in-mission induction training.

In order to address this gap in training, UNEP has partnered with the International Institute for Sustainable Development (IISD), the UN Institute for Training and Research (UNITAR), and FOI to develop a series of pre-deployment pilot training modules on peacekeeping and natural resources. The first pilot training was held at UNEP Headquarters in Nairobi in November 2010 for 21 environmental focal points representing 16 field missions, including 13 peacekeeping operations. A second training session for 30 pre-deployed peacekeeping personnel was conducted in December 2010 at the Cairo Regional Centre for Training on Conflict Resolution and Peacekeeping in Africa. Discussions are under way to integrate these modules into the standard pre-deployment and in-mission induction training programmes for all missions, as well as annual courses at peacekeeping training centres. In particular, training centres in Rwanda, Egypt and Nigeria have all prioritized training on natural resources for their 2012 programmes.

Camp management

The environmental performance of a mission depends upon the sum total of specific practices, technologies and behaviours for water, energy, solid and hazardous wastes, wastewater, wildlife and the management of cultural and historical sites. The 2009 Environmental Policy provides guidance on each of these specific areas of camp management and many key lessons have already been learned in each area.

Case study 3: Environmental training programmes for peacekeeping staff in the DRC



Group discussion session during an environmental training session for peacekeeping staff in the DRC

Given the linkages between natural resources and conflict in the DRC, the peacekeeping mission has adopted an environmental policy as well as organized and conducted a series of awareness training on environmental and natural resource management across all mission components during 2009-2011. The first DFS/UNEP/FOI joint environmental awareness training was conducted in December 2009 for military and civilian personnel from MONUSCO. A total of 45 staff from a wide range of mission units attended the training.

The aim of the training was to raise awareness and identify the key environmental challenges faced by the mission in terms of waste management, water and energy. Participants identified a range of challenges including wastewater treatment, solid waste and hazardous waste segregation and disposal, ground pollution from oil spills, external contractors' compliance with minimum environmental standards, renewable energy technologies and emergency preparedness plans. Incorporation and mainstreaming of environmental considerations within existing Standard Operating Procedures was highlighted as fundamental to achieving the mission's environmental performance goals. One of the key conclusions of the training session was the need for further capacity building and raising of awareness across all sections of the mission. As a result MONUSCO's environmental unit conducted a training campaign across all mission components during 2011, with additional training planned for 2012.

Water

During UN peace operations, water is used for personal consumption and site-specific communal activities, including in kitchens, toilets and laundries, as well as for washing equipment and sometimes in air conditioning units. For planning purposes, water use is estimated by DFS at 84 litres per person per day.⁴¹ Over a course of a year a peacekeeping operation of 15,000 personnel would consume 459,900,000 litres. Water requirements are typically met through local water supplies (surface and ground water), municipal services or through importation.

The figure of 84 litres of water per person per day can be contrasted with the UNHCR recommendation for water in refugee situations of 15 litres per person per day, and an absolute survival minimum of 7 litres.⁴² Thus, even small efficiency gains in mission use of water may have a large impact on human needs in water-scarce situations.

Meeting this requirement can be a major challenge in terms of both basic supply quantity as well as quality. MINURCAT, MINURSO, UNAMID and UNMISS, for example, operate in desert or semi-desert environments where less than 40 percent of the local population has access to clean water.⁴³ In such water scarce environments, daily water use for mission personnel can be set at a lower rate to avoid situations where peacekeeping camps consume vastly more than local communities. At UNAMID for example, the standard is 45 litres per person.

Water quality can also be a short-term problem, but it is often solved by the use of UN-contracted water treatment plants and regular monitoring by technicians against World Health Organization standards, as it is done by UNMIL for example (see Case Study 4). For example, purified drinking water is obtained from reverse-osmosis treatment plants, installed at the majority of MONUSCO bases in the DRC. On site treatment has an added benefit of minimizing embodied energy associated with transportation of drinking water bottles and subsequent waste streams.

There can be unintended consequences for local communities and host countries when peacekeeping missions use local water supplies. For example, missions can exacerbate local water scarcity if ground or surface water is used at rates beyond the ability of the natural system to recharge. A study analyzing these effects on IDP (internally displaced persons) camps in Darfur has been carried out by Tearfund with support from UNEP.⁴⁴ Some UN bases have established groundwater extraction rules in collaboration with host country water agencies to ensure water is extracted at sustainable levels.

There are also potential advantages to local communities and host countries when peacekeeping missions use local water supplies. The procurement of local water resources by UN Mission in Ethiopia and Eritrea (UNMEE), UNMIL and UNAMID has provided income through tariffs to local vendors. As a major consumer, peacekeeping missions have an opportunity to encourage and promote sound business and environmental practices by local suppliers. UNMIL has also supported local jobs and

capacity-building through the rehabilitation and ongoing maintenance of the host country's water infrastructure (see Case Study 4). At the closure of a mission, UN water infrastructure can also be handed over to local communities or host country water agencies, provided they are properly trained and have access to spare parts.

Solutions for improved water use

The 2009 Environmental Policy states that the Director of Mission Support will take measures to ensure that water is properly used by the mission and in accordance with local conditions.⁴⁵ A comprehensive and timely EIA is crucial to meeting this policy objective. As part of the EIA, relevant information should be gathered through site surveys, and, most importantly, through consultations with local water authorities and with local communities.

Reducing water use can relieve the need for imported water and mitigate the risk of the mission being seen by the local community as a resource competitor. Conservation measures by personnel and the use of low-technology water-efficient equipment are the easiest and most proven ways to reduce water use.

Water-efficient equipment has been used at a limited number of peacekeeping missions to date. Flow regulators on taps, low-flush toilet cisterns, shower timers and the metering of water consumption are employed in some missions alongside education campaigns that target wasteful water practices. UN system's contracts for the toilet ablution units now have water saving as a key performance indicator.⁴⁶ A combination of potential water conservation measures at the African Union Mission in Somalia (AMISOM) were calculated to be able to reduce water use by 42 percent from the business-as-usual baseline.⁴⁷

While many water-efficient fittings and equipment are available through the UN procurement system, their use in the field is limited due to lack of awareness and operational training. Furthermore, some fittings and equipment, such as water meters, waterless urinals or percussion taps for example, are not yet available through the centralized procurement system due to the perceived lack of capacity for these technologies to be adopted in the field. To this end, a number of new technologies are being piloted and evaluated by the UN mission in South Sudan (see Case Study 5).

Alongside these measures, the differentiation of potable and non-potable water supply can help reduce the use of drinking water for activities like vehicle washing, cement and pesticide mixing, irrigation and dust suppression.⁴⁸ These activities can be conducted as effectively with recycled grey water.

Rainwater tanks are a relatively low-cost and proven supply option that is available through the UN procurement system – although they are not used at most UN missions. As an exception, UNMIS has installed 5,000 and 10,000 litre rainwater collection tanks to supply non-potable uses. There is also potential to use rainwater for potable purposes if combined with careful collection and filtration (see Case Study 5).

Water recycling and treatment technologies can also reduce the demand for water. Peacekeeping missions can procure drinking water treatment systems using

ultra-filtration and reverse osmosis, as well as solar-powered water pumps, usually used by small units at remote locations.

Case study 4: Water quality testing and infrastructure improvements in Liberia



The peacekeeping operation in Liberia supported local jobs and capacity-building through the rehabilitation and ongoing maintenance of the host country's water infrastructure

UNMIL runs a fully operational water quality testing laboratory to permit monitoring of the physical, chemical and bacteriological quality of water supplied to troops. Currently 21 parameters are tested. A scope of work has also been developed to test additional parameters at an outsourced laboratory, including mercury, cyanide and arsenic.

UNMIL has also supported local jobs and capacity-building through the rehabilitation and ongoing maintenance of the host country's water infrastructure.

Case study 5: Water supply and increased efficiency investments in South Sudan⁴⁹



The peacekeeping mission in South Sudan operates 39 wastewater treatment plants generating 78,000 litres of non-potable water each day for activities such as fire-fighting, dust control, soil compaction, concrete, flush toilets, vehicle washing and gardening

Several water efficient technologies that are currently not available through the centralized procurement system have recently been piloted and tested by the peacekeeping mission in South Sudan. Token operated showers with low-flow showerheads, which can reduce the consumption of water during an eight to 10 minute shower from 15-18 litres to 7-9 litres, have been installed. In another example, waterless urinals, which are currently pilot tested by UNMISS in Juba through funding from the Swedish Government, have a potential to save an estimated 55,000 to 170,000 litres of water per unit. Since its establishment, UNMISS has installed 5,000 and 10,000 litre rainwater collection tanks to supply non-potable uses. There is also potential to use rainwater for potable purposes if combined with careful collection and filtration. UNMIS also operates 39 wastewater treatment plants generating 78,000 litres of non-potable water each day.

A 2011 study conducted by UNEP in collaboration with UNMIS has analysed low technology options for water use reduction.⁵⁰ A total of 10 water saving features, of which the most efficient were single flush urinals, low flush capacity toilet cisterns and aerated shower heads, have been identified as viable in terms of cost (initial outlay and operational expenditure), robustness and ease of use, and were found to be able to reduce water consumption by 46 percent in offices and 37 percent in residential areas.

Energy

Fuel is a substantial cost for UN peacekeeping operations. Missions rely almost exclusively on petrol and diesel fuel for generators, and the 17,000 vehicle fleet as well as jet A1 fuel for the 257 UN aircraft.⁵¹ The annual cost of fuel for DPKO-DFS supported base operations was USD 638 million⁵² in 2009, while the annual DPKO aircraft fuel costs were estimated at USD 201 million in 2010.⁵³ Furthermore, a 2006 study by the US Army Policy Institute (USAEPI) found that in the case of US military – which has a similar structure with base camps and remote bases requiring constant resupply – fuel made up 70 percent of all tonnage shipped to those bases.⁵⁴ The study also found that for every one litre of fuel used in remote bases, more than 6 litres of fuel were used to transport it.⁵⁵

These costs point to an overriding financial incentive to reduce fuel use – aside from any environmental considerations. But a 2010 report on UN fuel conservation and efficiency found no incentives in place for efficiency in aviation, vehicles and power generation and no systematic consideration of alternatives to diesel power generators. The report also found that fuel data collection at a number of missions was inadequate to permit effective fuel efficiency analysis and the monitoring of consumption. Moreover fuel efficiency was not part of the bid evaluation criteria for vehicles or aircraft.⁵⁶ In 2011, the General Assembly also recognized the need for better fuel efficiency.⁵⁷

There are also security dividends in reducing fuel use as fuel convoys in certain countries can be vulnerable to attack. Continual restrictions on fuel deliveries for UNMEE in Ethiopia curtailed some of the mission's operations.⁵⁸ A 2009 study in Afghanistan highlighted the dangers of fuel convoys in hostile environments with almost one NATO/ISAF casualty for every 24 fuel resupply convoys, and one US Army casualty in Iraq for every 28.5 convoys.^{59,60} This has been a powerful incentive for the US and other armies to move away from oil towards low carbon and renewable energy technologies.

Table 3: Emissions inventory for 20 peacekeeping missions: 972,304 tonnes CO₂ equivalent (2008)

Source of emissions	Percentage
Air travel (troop rotation, UN air fleet and commercial)	46%
Power generation	26%
Road vehicles	15%
Refrigeration / AC	9%
Purchased electricity	4%
Other emissions	< 1%

Box 3: Greenhouse gas inventory of peacekeeping operations

The inventory found that peacekeeping operations contribute 56 percent of the UN system's total climate footprint of approximately 1.75 million tons of CO₂ equivalent per year.⁶¹ Air transport (46 percent) was the largest contributor to the peacekeeping footprint when combined with troop deployment and rotation requirements and the UN Air fleet. Power generation (26 percent) and road transportation (15 percent) were also major sources (see Table 3). When converted to greenhouse gas emissions per UN personnel per year, this inventory also highlights that peacekeeping operations 'behave' like developed countries in developing countries, often greatly surpassing the host country's GHG footprint per capita per year.

In assessing the use of fuel by different components of a mission, a 2008 greenhouse gas emissions inventory at 20 UN peacekeeping missions is instructive. The inventory identified the various sources of emissions and thereby overall energy use (see Box 3 and Table 3).⁶²

Solutions for improved energy use

Though by far the most fuel-intensive, transport by air is generally the safest and most secure option for moving personnel and goods to and from peacekeeping operations. The UN is attempting to reduce air transport requirements. For example, the Transportation and Movements Integrated Control Centre at the Regional Service Centre in Entebbe is seeking to optimize transportation resources in Eastern and Central Africa and reduce air travel demands through enhanced flight planning.

Strides in the right direction are also being made regarding road transport, as UN vehicles are now starting to be purchased according to fuel efficiency standards. Some technological and administrative solutions are also employed – albeit on a limited basis. The UN logistics base in Brindisi, for example, is piloting eight electric cars and 27 electric forklifts or reach trucks. Similarly, 10 electric cars are currently being used within UNIFIL headquarters in Naqura, Lebanon (see Case Study 12). CarLog systems in most UN-owned vehicles monitor fuel consumption and speeds to encourage safe and environmentally friendly driving – although financial savings were also a main motivation for this system. In Timor-Leste, CarLog systems and the application of awareness stickers to vehicle windscreens has led to a 15 percent drop in energy consumption over 12 months (see Case Study 6).⁶³ Across the UN the UNEP/TNT Clean Fleet Strategy is tackling vehicle fuel consumption. The Clean Fleet Strategy evaluates the environmental impact of fleets and provides cost-effective remedial strategies, encompassing improved maintenance, driver behaviour, fuel quality and the use of alternative vehicle technologies.⁶⁴

Part 1: Improving the environmental management

The use of energy in buildings and facilities also contributes to emissions and fuel costs of UN missions. Ad-hoc behavioural change efforts are reducing energy demand at some bases.⁶⁵ The UN Mission in Timor-Leste (UNMIT) has adopted some energy-efficient practices through the leadership of an Environmental Committee (see Case Study 6). UNIFIL is introducing energy efficient generators and centralised cooling systems (see Case Study 12).

There is less progress, however, on the use of simple technologies and fittings to improve energy efficiency of buildings. While there is ample evidence that buildings normally offer significant greenhouse gas emission

reduction opportunities at low or negative costs, few missions have employed low technology solutions such as sunshades, blinds, window tinting or wall and ceiling insulation. There is also scope for increased use of energy-efficient lights, computers and office equipment. Furthermore, provision of energy meters to monitor both different energy loads, such as heating, cooling, lighting or small power, and energy used by different departments or buildings would offer a simple, low cost opportunity to significantly reduce energy use. However, low awareness, and lack of long-term cost-savings considerations, typically mean that these opportunities are not realized.^{66,67}

Case study 6: Investing in energy efficiency and renewable energy in Timor-Leste

In Timor-Leste, CarLog systems and the application of awareness stickers to vehicle windscreens has led to a 22 percent drop in UNMIT vehicle idling times and 15 percent drop in energy consumption over 12 months. UNMIT has adopted some energy-efficient practices through the leadership of an Environmental Committee. The committee meters energy use, informs staff of wasteful practices and runs advocacy campaigns to encourage staff to switch off devices and set heating and cooling units at efficient temperatures. A common rule of thumb says that 1 degree of reduced artificial heating/cooling demand translates to 5 percent savings in energy use for heating/cooling the building.⁶⁸ This work has resulted in a monthly reduction in diesel fuel usage of 50,000 litres, equating to annual savings of USD 360,000.

Furthermore, UNMIT powers remote VHF (very high frequency) repeaters with solar panels. Comparative data from UN peacekeeping operations in Timor-Leste, Sudan, the DRC, Haiti, Sudan and the Western Sahara have found that the capital investment for some renewable technologies – when coupled with energy-efficient building design and technologies – could be recovered in one to five years. In Timor-Leste, for example, 100 percent of the mission's energy use in 2008 was from diesel generators. Modelling suggested the replacement of diesel with a mix of 11,000 m² of photovoltaic panels, grid electricity and diesel – alongside more efficient heating and cooling systems and insulation – could reduce yearly electricity consumption from 13 300 MWh to 7 200 MWh. The additional up front cost of USD 11 million was modeled as being offset in just over two years by annual savings of USD 4.2 million in comparison to the original energy baseline of 100 percent diesel (see Figure 1).⁶⁹



The peacekeeping operation in Timor-Leste powers remote VHF (very high frequency) repeaters with solar panels

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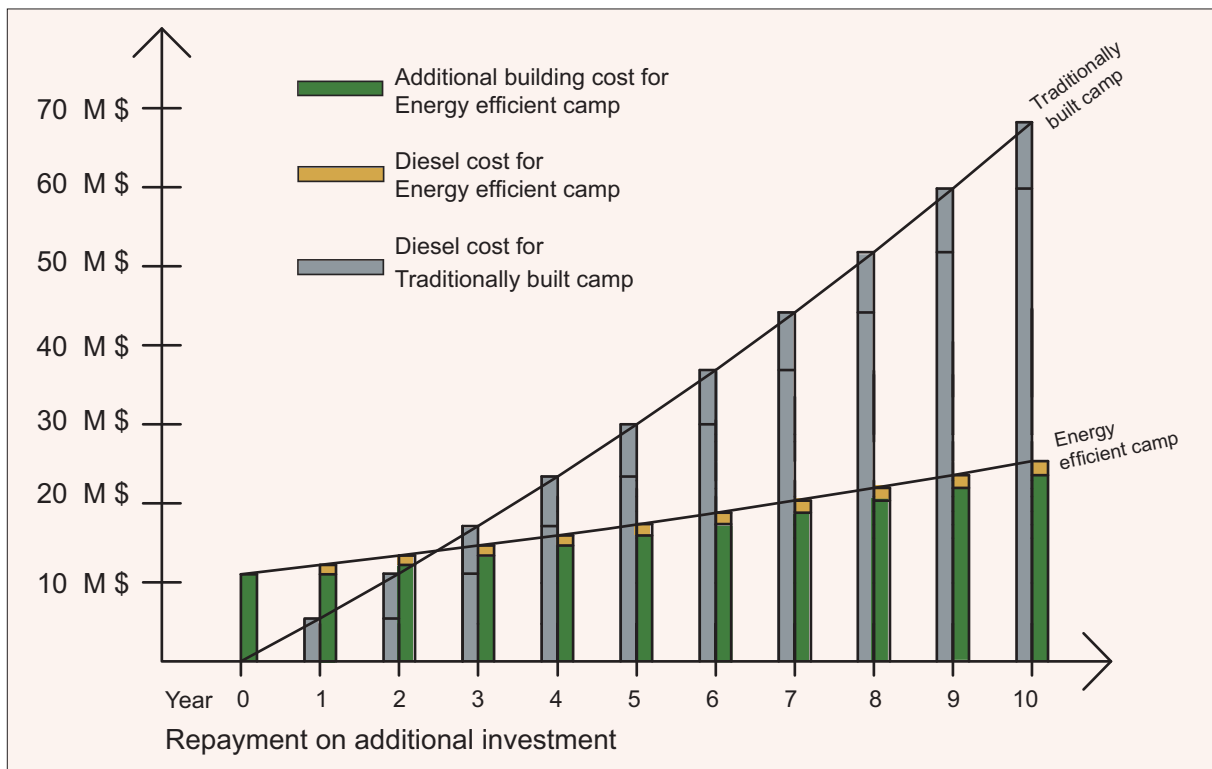


Solar water heaters are mounted on the roofs of sanitary units at a UN peacekeeping base in Kinshasa, DRC

Regarding energy generation, a range of renewable systems can replace or augment diesel generators with long-term fuel savings and environmental benefits. DFS has established a contract for photovoltaic-diesel hybrid power systems and solar thermal panels for ablution units. Several missions use photovoltaic solar units on a limited scale, including UNIFIL, UNMIT, MINUSTAH and MONUSCO (see Case Study 6 and 12). The long life of solar panels – up to 25 years – can ensure long-term savings against the initial investment. The portability of the panels also allows easy relocation to other camps and missions.

Cost-benefit analyses of renewable energy systems, including maintenance and training costs, are difficult to make when the length of mission is unknown. The lifetime of UN peacekeeping operations (past and current) ranges between a few months and several decades, with a mean average of seven years⁷⁰ so pay-back periods for some technologies can in fact be commercially feasible on preliminary modeling. Comparative data from UN peacekeeping operations in Timor-Leste, Sudan, the DRC, Haiti, Sudan and the Western Sahara have found that the capital investment for some renewable technologies – when coupled with energy-efficient building design and technologies – could be recovered in one to five years. Figure 1 below demonstrates that for 2,882 person camp in Timor-Leste, the additional upfront cost of USD 11 million could be paid back in just over two years (see Case Study 6).

Figure 1: Repayment on initial investment for an energy efficient and traditional build camp, UNMIT, Timor-Leste⁷¹



A range of other renewable technologies could be feasible in the future depending on mission-specific security, cost and climate considerations. Wind turbines, for example, are considered reliable for some UN camps. The upfront construction cost remains a barrier and some turbines may create localized background noise for radars or be vulnerable to attack. Despite these challenges, a wind power feasibility study at the EUFOR Butmir camp in Bosnia and Herzegovina found that with acceptable winds (10.2 m per second) a 30-40 percent proportion, combined photovoltaic-wind power generation solution could save 70 percent in energy costs compared to 100 percent diesel generation.^{72,73}

Biogas units that use anaerobic digestion powered by food and sewage waste may also be possible. A UNMISS biogas feasibility study found that an anaerobic digestion system could produce 500m³ of biogas from mission's own sewage and food waste, and further 1,400m³ of biogas if waste from a nearby brewery is utilized. This quantity of biogas would be enough to power cooking facilities for 1500 staff and generate power for four office blocks of 120 occupants each (see Case Study 7). Safety issues related to the handling of biogas within the camp also need to be addressed properly.

Solid and hazardous waste

A peacekeeping mission generates significant amounts of solid and hazardous waste. Solid waste can include office refuse, construction debris, scrap metal and food refuse. Hazardous waste encompasses medical products, used oil, tires, batteries, electronic waste, stocks of chemicals, explosives and ammunition.

Waste disposal is often sub-contracted and carried out by local contractors, who may lack capacity to do so in



Short-term waste management practices, like this one from UNMIS in 2006, can result in the release of toxic fumes and ash

Table 4: 2008 UNMIS solid waste classification study

Type of solid waste	Percentage
Food	29%
Cardboard	20%
Paper	12%
Glass	10%
Scraps / wood / rubber	10%
Organic waste miscellaneous	8%
Plastics	7%
Tin and aluminium	4%

a responsible manner. Furthermore, waste management infrastructure in the majority of post-conflict countries is either non-existent or unable to handle the high volumes and types of waste produced by UN missions. Therefore, the reliance on local capacities and infrastructure to manage and dispose of waste in a safe manner can have unwanted consequences for the health and safety of both peacekeepers and local communities. For example, disposal of waste to poorly constructed and managed landfill sites can lead to pollution of local water bodies through the discharge of leachate or other contaminated landfill liquids as well as direct exposure of local population to contaminated waste during salvage activities.

Even when relying on their own capacities to manage waste, peacekeeping operations run a risk of unwanted consequences. For example, the use of open pit burning of solid waste, which is often used during early stages of mission establishment, will result in the generation of toxic fumes and ash. In order to mitigate these risks, some missions, such as UNMISS and UNIFIL, have established landfill sites. UNIFIL has recently constructed state of the art technical landfill site serving both the local community and the mission (see Case Study 12).

The nature of solid waste produced can vary throughout the lifecycle of a mission. High volumes of construction and building material waste are common during establishment and liquidation; while high volumes of plastic bottle waste, for example, can occur before local water supplies are secured. A 2008 UNMIS solid waste characterization study found that, during the operational stage of the mission's lifecycle, food was the largest component of solid waste followed by cardboard and paper (see Table 4 and Case Study 7).

Disposal of hazardous waste – such as pesticides, oil products, hazardous chemicals, batteries, tires, ammunition, ozone-depleting substances and electronic equipment – is a significant challenge for UN peacekeeping operations. Mission waste can also contain heavy metals that require long-term environmental management, including proper storage prior to disposal. Furthermore, the increasing use of IT equipment has resulted in electronic waste becoming one of the most significant parts of the hazardous waste stream.

Case study 7: Waste management in South Sudan⁷⁴

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Sanitary landfill site in construction has been dug at the peacekeeping base in Kadugli, 2009

A 2008 UNMIS solid waste characterization study (excluding hazardous, chemical and medical waste) found daily solid waste generation to be 22,000 kilograms or 1.5 kilograms per person. Food was the largest component followed by cardboard and paper (see Table 4).

At UNMIS waste was initially disposed unmanaged on the outskirts of the camp. But scavenging by the local population, wind-blown waste, smoke from burning litter and an increase in birds threatening airplanes at the neighbouring airport has also hampered the mission's air operations. UNMIS engineers designed a fenced waste disposal site with an incinerator for solid waste, a hazardous storage unit and a separate landfill for ash. The waste disposal system has been expanded to 19 other sites with improvements including rainwater run-off management and improved containment barriers to prevent leachate. Some missions use waste compaction equipment, which helps better management of waste for recycling such as metals and paper, and it also reduces the volume of waste going to landfill. The Global Field Support Strategy now includes a module on waste management within a camp based on practices developed by UNMIS. Specific caution is made for specifications of the incinerators to avoid toxic fumes for surrounding personnel and communities.

Biogas units that use anaerobic digestion powered by food and sewage waste may also be possible. A UNMIS biogas feasibility study found that an anaerobic digestion system could produce 500m³ of biogas, enough to power cooking facilities for 1500 staff. By also processing waste from a nearby brewery further 1,400m³ of biogas could generate power for four office blocks of 120 occupants each. Safety issues related to the handling of biogas within the camp also need to be addressed properly.



Unsanitary sewage disposal site near Kinshasa in the DRC, 2009

Awareness of and compliance with international legislation, such as the Basel Convention, is also of paramount importance when dealing with hazardous waste. The convention governs the trans-boundary movement of hazardous waste. It applies to UN waste when operating in signatory countries. It requires the disposal of hazardous waste to be undertaken as close as possible to their source of generation in accordance with environmental guidelines. It also governs the destruction of small arms ammunition, weapons and explosives. For example, components like trinitrotoluene⁷⁵ can be carcinogenic and need to be handled and disposed properly. The additional security issues associated with weapons complicates disposal. Proper storage and labelling of substances is also important.⁷⁶ The convention also requires parties to follow national waste management procedures – although many post-conflict governments are ill-equipped to meet these standards.⁷⁷

Solutions for improving solid waste management

Waste management is one of the sectors in which some field missions are making good progress. The 2009 Environmental Policy states that each office or unit generating waste at the mission should undertake practical measures to ensure that the generation of waste is minimized and that waste is segregated.⁷⁸ Segregation of waste facilitates recycling and/or proper treatment of different types of waste. It can also help minimize the need and cost of specialized treatment of hazardous waste.

Reducing, reusing and recycling are key parts of a generic waste management strategy with some limited application in peacekeeping missions. At UNMIT plastic bags have

been replaced with locally produced cotton bags. UNMIT has also reduced paper with a 15 percent ‘greening tax’ and the programming of all printers to efficient settings. In planning the new UNSOA bases, improved recycling, composting and incineration were calculated as being able to reduce landfill waste by 88 percent.⁷⁹

The segregation of waste streams can benefit the local recycling industry. UNMIT, for example, is working with a local non-governmental organization to collect waste paper. The paper is shredded and combined with water, saw dust and coffee bean refuse to produce cooking briquettes that replace firewood. UNIFIL has established a community-led recycling plant for plastic bottles, cans and glass to reduce the mission’s waste. The recyclables are collected using bins at dining facilities. MINUSTAH has supported the development of a number of innovative projects to recycle mission waste into new products or sources of revenue as well as to manage hazardous waste (see Case Study 8).

Recycling is possible even in insecure environments. Several NATO/ISAF bases in Afghanistan separate recyclable and reusable waste. The cardboard, plastic and glass are shipped to Pakistan for recycling and the wood pallets are given to the local Afghan community to be used as fuel for heating.⁸⁰

Wastewater

Liquid waste or wastewater includes “black water” which is sewage from toilets and “grey water” which is from shower, sink and laundry wastewater. The improper

treatment and disposal of wastewater may cause environmental as well as health problems for UN staff and local communities. The discharge of sewage directly into water bodies without prior treatment is forbidden, as stated in the 2009 Environmental Policy. Prior treatment on and off site requires the settlement of solids, the removal of organic matter and inorganic compounds and the disinfection of the residue.⁸¹

The cholera epidemic that broke out in Haiti in October 2010, eventually killing some 6,000 people and sickening 300,000, particularly underscores the importance of hygiene and the risks of poor wastewater treatment. In the weeks following the outbreak, it became a commonly held belief in Haiti that the disease strain had originated from a UN peacekeeping camp in Mirebalais, some 60 kilometres northeast of Port-au-Prince. This created a negative perception of UN peacekeeping troops within the local population and led to violent demonstrations against them.

A thorough investigation by an Independent Panel of Experts has since concluded that the cholera outbreak was caused by 'a confluence of circumstances', including poor water and sanitation conditions in Haiti and the widespread use of river water for washing, bathing and drinking, while sanitary conditions at the Mirebalais MINUSTAH camp were not sufficient to prevent contamination of local waterways with human faecal waste.⁸² This incident, nevertheless,

illustrates the importance for UN peacekeeping missions to continue paying particular attention to environmental considerations when planning and managing their operations. The Secretary-General has since convened a task force within the UN system to study the findings of the Independent Panel of Experts and to ensure prompt and appropriate follow-up action to their recommendations in MINUSTAH as well as in the other missions.

Many post-conflict countries simply lack the infrastructure and environmental standards for the safe disposal of liquid waste. In 2009, in Kinshasa, DRC, the only site for the disposal of sewage that was authorized by the local government for all wastewater management contractors – including those servicing MONUSCO – comprised direct disposal into a river. While it shows that such disposal can contaminate local water supplies, this example also demonstrates the challenges that field missions face to dispose of their sewage in an appropriate manner.

Solutions for improving wastewater management

In order to address the lack of local infrastructure for safe disposal of sewage, the MONUSCO environmental unit and camp management unit are currently testing biolatrines as part of a pilot project in Kinshasa.

Most other UN missions rely on soak pits, leach fields and oxidation ponds that contain partially treated wastewater



MINUSTAH Civilian Camp (MAC-2) is finding creative ways to reuse and collect plastic bottles, 2011

Case study 8: Waste recycling in Haiti



The MINUSTAH Community Violence Reduction Section employs youth through labour-intensive environmental projects such as this tyre reuse project

MINUSTAH established a partnership with UNDP, the Government of Haiti and local communities for the recycling of shredded paper and cardboard boxes used to make charcoal briquettes. The briquettes have provided a valuable source of fuel, in addition to reducing the amount of garbage taken to dumping sites. WFP (World Food Programme) is now one of the biggest customers for the briquettes from this project and has integrated this source of energy into their school canteen programme, where the charcoal briquettes are used to power the stoves.

In MINUSTAH, the proper disposal of HAZMAT (hazardous materials) has contributed to the protection of both the community and environment from pollutants; generation of income through the sale of hazardous materials to contractors for recycling and reuse; and creation of job opportunities in the local community. The final disposal of waste oil in MINUSTAH, through its use as a source of fuel, supports the manufacturing of essential oils. Reuse and recycling of used lead acid batteries and metal and electronic scrap generates revenue for the Mission, while contributing towards a healthier environment and communities. On-site disposal of medical waste following proper segregation principles enables only infectious materials to be incinerated, while sensitive medications such as expired anaesthetics and vaccines in vials are encapsulated in concrete to prevent reuse by local communities.

Materials contaminated with oil, such as filters, are incinerated to remove oil prior to disposal, while biological decontamination using bacteria assists in the remediation of oil contaminated soils.

Finally, MINUSTAH is supporting a programme that reuses used vehicle tyres for sandals and materials to control soil erosion. The programme prevents tyre burning and employs local women in Haiti. MINUSTAH is also considering the reuse of rubber for road construction as part of an asphalt binder and sealant. In addition, the used tyres from MINUSTAH are being used by FAO (Food and Agriculture Organization) in urban agriculture for soil erosion control and the Community Violence Reduction Section uses the used tyres for construction of soil retention walls.

and are left to allow the growth of algae and bacteria which decomposes the waste. UNMIS operates two oxidation pond systems. The first pond is an aerobic treatment plant using compressed air. The second pond is a physical-chemical treatment plant with an oil-water separator and settling tank. Oxidation ponds require significant space and need to be well secured and maintained to prevent accidents and the spread of disease. The ponds and related infrastructure can be handed over to the host nation when the mission ends – providing that appropriate training and maintenance needs are accounted for.

Wastewater treatment systems that produce reusable non-potable water from effluent are viable options for many missions. The UN-contracted prefabricated plants that obtain a reusable effluent cost USD 100,000 each, while plants that include only a septic tank cost USD 22,000. Over 70 percent of all the wastewater treatment plants in operation are in the three missions deployed in a desert or semi-desert climate: MINURCAT, UNAMID and parts

of UNMIS. UNMIS operates 39 treatment units generating 78,000 litres of non-potable water each day, while the installation of wastewater treatment plants at UNAMID has allowed for the recycling of over 30 million litres annually (or some 85,000 litres a day), with the overall target of reducing freshwater use by up to 40 percent (see Case Study 9). Some sewage treatment plants also offer opportunities for biogas generation as a renewable energy source (see Case Study 7).

At MINUSTAH a combination of new wastewater treatment plants that are being installed across the mission, septic tanks and soakaway pits are used for handling black and grey waters. Furthermore, MINUSTAH has established contracts with local contractors for sewage disposal from MINUSTAH camps to the government authorized dumping sites. The Contract Management Unit, Engineering Section and Environmental Compliance Unit are periodically visiting dumping sites to verify contractor compliance with the condition of contracts.

Case study 9: Wastewater treatment in Darfur

In 2011, UNAMID had a mission population of 27,000 personnel. High temperatures ensure a high demand for potable water. Supply is scarce because of inadequate groundwater recharge, low annual rainfall and competing demands from local agricultural communities.

UNAMID operates 106 wastewater treatment units to reduce its demand for external water resources. Each unit can treat the grey water and black water generated by 200 people. The product is satisfactory for activities with limited human contact such as toilets, fire-fighting and irrigation. To facilitate the introduction of the wastewater system UNAMID carried out an education campaign for staff about the proper use of wastewater. The education campaign also helped staff overcome cultural sensitivities and concerns about water-borne diseases.

The installation of wastewater treatment plants has allowed for the recycling of some 85,000 litres a day, with the overall target of reducing annual freshwater use by up to 40 percent. UNAMID will have 156 units operating by the end of 2011 and is modifying 200 toilet and washing units to use treated water.



Wastewater treatment plant, El Fasher, Darfur

Wildlife

UN missions can threaten local ecosystems, including plant and animal species, in various ways that may have a detrimental impact on the livelihoods of nearby communities. Examples include unregulated hunting or fishing, or the purchase and possession of dead or live animals and plants by mission staff, the construction of structures that block wildlife corridors and the clearing of natural habitats.

Peacekeepers have significant buying power and are attractive targets for vendors selling endangered fauna or flora. While peacekeepers are rarely involved in the illegal wildlife trade, a high ranking officer was arrested in 2001 for allegedly trying to smuggle elephant tusks and animal skins out of Kenya. An investigation uncovered the involvement of three other UN soldiers.⁸³ While such instances are the exception, primates have also been used as pets in several camps.

The 2009 Environmental Policy requires the Director of Mission Support to issue instructions to prohibit the hunting, logging, harvesting, collecting, purchasing or acquiring of wildlife, live or dead, or any parts and derivatives. Fishing is only permitted as a recreational activity when it does not interfere with the needs of the

local population. The mission must also respect the norms of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which aims to ensure that the international trade in wildlife does not threaten their survival.⁸⁴

Apart from the impacts that peacekeepers have on the wildlife in some instances, they have also actively contributed to conservation efforts. For example, UNMIL provided logistical support for Conservation International's Rapid Biological Assessment in northeast Liberia in 2005 (see Case Study 10). In another example, MONUSCO has established close links with the Environmental Crime Programme at INTERPOL in efforts to tackle gorilla smuggling in the greater Congo Basin (see Case Study 11).

Outside of the UN context, a collaborative effort between the Wildlife Conservation Society and the US military illustrates a small but effective effort to combat the illegal trade in wildlife products by American service members. Surveys of deployed staff found that wildlife items were sold on and off-base in over 40 countries, notably Afghanistan. The US conducted pre-deployment and in-theatre training for over 4,000 soldiers in Afghanistan. Patrols of markets at US camps in Afghanistan have confiscated over 350 prohibited items.⁸⁵

Case study 10: Supporting local conservation efforts in Liberia

UNMIL provided logistical support for Conservation International's Rapid Biological Assessment in northeast Liberia in 2005 where not only the significant scientific assessment was conducted successfully but the participating international scientists also provided on-the-job training for Liberian scientists and government authorities using state of art equipment. As UNMIL had a clear mandate to assist in restoring the proper administration of natural resources, and the country is considered a biodiversity hotspot, any such activities to investigate the existing resources and build capacity of the host nation were necessary. UNMIL was the only entity in the country able to provide support to such activities within non-accessible forests.

UNMIL also made extensive efforts to prevent illegal activities and settlements taking place in Sapo National Park (see Case Study 15).



The UN peacekeeping mission in Liberia supported Conservation International to conduct a rapid biological assessment in 2005

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Case study 11: Preventing environmental crime in the DRC



A peacekeeper in the DRC works on geographical surveillance at Camp Ndromo

In DRC, some of MONUSCO's military contingents had used charcoal and wood as a fuel source for cooking. However, these energy sources are often associated with local deforestation and in some cases illicit trade. Faced by high levels of deforestation to meet the demand for charcoal, coupled with an expanding illicit trade, in 2010 the MONUSCO Special Representative to the Secretary-General forbid military contingents from using charcoal and encouraged the use of alternative cooking fuels. Furthermore, in January 2011, MONUSCO Force Commander, assisted by the environmental unit, established a set of Environmental Guidelines for MONUSCO Military Operations, which recommended, inter alia, to "avoid or minimize using firewood in all mission locations."

The Environmental Crime Programme at INTERPOL also assists in the enforcement of national and international treaties to combat flora and fauna related crimes. INTERPOL has been involved, for example, in supporting MONUSCO and Congolese efforts to tackle gorilla smuggling in the greater Congo basin. MONUSCO airlifted endangered gorillas to a safe sanctuary.⁸⁶ The issue is also covered within MONUSCO environmental military guidelines. INTERPOL also contributes to the design of future training programmes for peacekeepers.

Historical and cultural resources

Historic structures, areas of cultural importance and unknown archaeological sites can be uncovered when establishing a UN peacekeeping base camp. The actions of peacekeepers can also accidentally damage or destroy historical or cultural resources. The 2009 Environmental Policy states that mission leadership issue directions for the protection of places of cultural, religious, historical and/or architectural value.⁸⁷

In 2007, several prehistoric archaeological sites in the Western Sahara were vandalized by MINURSO military

observers.⁸⁸ Disciplinary action was taken against two MINURSO personnel. The head of MINURSO made cultural awareness training mandatory for induction programmes. The mission also funded a UNESCO-assisted restoration of the damaged sites.^{89,90} Outside the UN setting, an example involving US forces in Afghanistan highlights the need to accommodate historical and cultural issues in the operation of a base. A US base in Gardez is built around an Afghan cemetery. Soldiers are careful not to walk through the cemetery, which covers a few acres in the middle of the base, and locals can visit the graves pending appropriate security checks.

Case study 12: Comprehensive environmental management improvements in UNIFIL, Lebanon

UNIFIL has made significant progress in the implementation of the 2009 Environmental Policy by establishing a comprehensive management system which facilitated implementation of a number of environmentally sound initiatives as outlined below.

Environmental Management System (EMS)

Based on the 2009 Environmental Policy, UNIFIL issued the “Environmental Guidelines for UNIFIL” document in July 2010 as well as the draft “Environmental Action Plan for UNIFIL” in April 2011. The plan defines general and specific environmental objectives, long and short term sets of activities, and corresponding responsibilities. The environmental compliance within UNIFIL’s Area of Operation is insured through the integrated implementation of the Environmental Management System (EMS) supported by Environmental Partners. The EMS is composed of the following elements: Green Committee, Environmental Management Unit, Environmental Officers, Environmental Focal Points and Environmental Logs.

Energy Efficiency – Vehicles

UNIFIL operates 10 electric vehicles for general purpose use around the headquarters. The vehicle have been modified by UNIFIL technicians, fixing a solar panel as a cover for the rear cargo area. This enables recharging while the vehicle is being used.



UNIFIL operates 10 electric vehicles for general purpose use around the headquarters

Case study 12: Continued



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Solar panels, seen here at a UNIFIL base, can drastically reduce energy costs and be offset in as little as five years

Energy Efficiency – Generators

UNIFIL is in the process of introducing the latest 1273kVA electronic injected fuel efficient generators. The engines are equipped with Hydraulically Activated Electronically Controlled Unit Injector (HEUI) Systems. The HEUI system accurately sprays the exact amount of fuel needed into the cylinders regardless of load variations. This cuts smoke emissions and fuel consumption by up to 20 percent. This system has been recommended to DFS Headquarters for consideration in future systems contract procurement exercises.

Energy Efficiency – Chillers

UNIFIL has installed Chiller Systems for two multi storied hard wall buildings. Previous practice would have required the installation of 160 regular single AC units. By employing this system, air-conditioning can be centrally controlled and ensure that cooling is minimized off peak and after working hours.

Energy Generation – Solar Power

The ICTS (Information and Communication Technology Service) solar energy project became operational in February 2010 with 70 percent of the ICTS building's requirement coming from integrated photovoltaic (PV) panels. In the first three months of operation up to May 2010 the equipment had saved USD 6,301, calculated on the basis of USD 0.75 per kWh cost, and 4806 kilograms of CO₂. The mission is expected to recover its investment in five years and the life span of the equipment is 25-30 years. The maintenance is carried out by ICTS' own technicians and the equipment can be reused in different locations and climates.

Waste Management – Technical Landfill Sites

In 2010 UNIFIL completed the construction of a technical landfill which eliminated 30 years of bad waste management practice by both the mission and the local municipality. The first phase of the project involved the segregation of recyclables and their removal to recycling plants. In the second phase a technical landfill was constructed for the remaining non-recyclables. To complete the restoration of the area, a leachate and methane collection system was installed, top soil was provided to facilitate vegetation cover and 1,200 trees were planted.

Protection of historic and cultural sites

The UNIFIL Headquarters includes the Naqoura cemetery and a historic building within its security perimeter. In the spirit of cooperation with the local Lebanese community, UNIFIL continues to clean and maintain the property. Prearranged access is granted with the required security measures to patrons and visitors to attend burials and memorials inside the Mission Headquarters.

Camp closure and liquidation

The camp closure and liquidation phase is an important aspect of the overall environmental management of a mission. Poor camp closure in regard to environmental issues can lead to costly remediation and impact the relationship with the local community. The initial and final Environmental Baseline Studies, as discussed previously, are key inputs into this process (see Case Study 1).

By nature peacekeeping operations are intended to be temporary. Decommissioning of peacekeeping camps involves the deconstruction of buildings and equipment, and the removal of hazardous materials and waste.⁹¹ The end of a mission may also involve the handover of some infrastructure to the host nation, including waste disposal systems or energy and water infrastructure. Local needs, training and maintenance need to be considered in the handover process. The objective during the base camp closure or liquidation phase is to leave the site occupied by the camp as close to its original condition as possible.⁹²

The following example from UNMEE best describes the importance of the liquidation phase and provides useful lessons for other missions. After the termination of UNMEE's Security Council mandate on 31st July 2008 and the subsequent liquidation process, an audit of liquidation activities was conducted by the Office of International Oversight Services (OIOS) in November 2008. While the audit concluded that "in general, there were adequate controls over liquidation activities [and that] ...the lack of full cooperation of the host

Government of Eritrea has significantly impacted the implementation of the liquidation tasks", it also pointed out areas in need of "urgent corrective action". These included: lack of disposal method for 6,585 assets with the total depreciated value of USD 5.1 million; lack of access to 1,983 items with the depreciated value of USD 2.5 million located in the areas restricted to the mission by the Eritrean Government; lack of provisions to address the cost of disposal in these restricted areas and potential liability with respect to environmental damage; lack of arrangements to ensure that the assets were disposed of in an environmentally responsible manner; destruction of 1,160 non-expendable IT assets while they could have been donated, sold or transferred to another mission; and a large backlog of unaddressed assets was evident at the time of the audit, two months before planned completion of liquidation phase.⁹³

This experience shows that even though adequate controls over liquidation activities were followed, a number of serious shortcomings in the liquidation process including the lack of arrangements to ensure that the assets were disposed of in an environmentally responsible manner were identified. To this end, the new version of the UN liquidation manual, to be approved in 2012, is expected to provide a better integration of environmental considerations. Some of its guidance is inspired by the *Environmental Guidebook for Military Operations*.⁹⁴

A thorough assessment of lessons learned from other camp closures and associated liquidation procedures is beyond the scope of this study and will be provided as part of the new liquidation manual.

Part 2

Addressing natural resource risks
and opportunities for more effective
peacekeeping

P A R T 2 Addressing natural resource risks and opportunities for more effective peacekeeping

A strategic approach to natural resources is a necessary part of meeting the peace and security objectives of peacekeeping. As discussed in the introduction, since 1948, UN peacekeeping missions with a total cost of USD 42 billion have been deployed to address conflicts where natural resources have played a key role in the conflict and threatened to destabilize the fragile foundations of peace (see Annex 1). This figure represents half of the total peacekeeping expenditures. Thus, failing to address the links between conflict and natural resources has major cost implications for the international community, as well as for those countries and populations devastated by conflict.

Part 2 of this report looks beyond the immediate impact of peacekeeping operations on the local environment and evaluates broader links between natural resources, conflict and peacekeeping. It reviews the various approaches and instruments available to the UN Security Council in addressing conflicts financed and fuelled by natural resources in order to identify emerging good practices, challenges and key lessons learned. It specifically examines situations where peacekeeping missions have been mandated by the UN Security Council to help national authorities address natural resource challenges. Activities authorized to this end include restoring the administration of natural resources, reasserting control over extraction sites, protecting related infrastructure and restricting the export of natural resources.

This part also evaluates how peacekeeping operations have provided support to UN Expert Panels that have investigated and monitored violations of commodity sanctions which have been used by the UN Security Council to restrict financing to individuals or groups that profit from the exploitation and trade of natural resources.

Furthermore, Part 2 examines how natural resources can either support or undermine the effectiveness of Disarmament, Demobilization and Reintegration (DDR) programmes as well as how Civil Affairs sections in peacekeeping missions address natural resource issues throughout their work, at the local level, in strengthening conditions and structures conducive to sustainable peace, reconciliation and conflict prevention. Using natural resources as an arena for dialogue and confidence building between divided communities, as well as a platform for

cooperation between communities and emerging levels of local and national government is also considered.

The chapter concludes that peace and security can no longer be separated from the way that natural resources are governed in a post-conflict context. The way that peacekeeping operations handle risks and opportunities from natural resources can have an important impact on the overall effectiveness of the mission and can also influence the trajectory of longer term development and sustainable resource use. As a result, where natural resources have been a factor in the conflict, where they have a major role in the national economy or where they support the majority of rural livelihoods, a key focus of peacekeeping, peacebuilding and post-conflict reconstruction should be on strengthening natural resource governance.

Security Council mandates for peacekeeping operations involving natural resources

The role of peacekeepers in relation to natural resource issues is principally determined by the mandate given to the peacekeeping mission by the UN Security Council. The Security Council decides on the scope of a mandate on the basis of the nature of the conflict and on the specific role requested of the UN. Despite the deployment of 17 UN peacekeeping operations since 1948 that address conflicts with clear links to natural resources, the mandates rarely acknowledge this fact. Only peacekeeping missions in four countries have been given a direct role to address natural resources: Cambodia, Sierra Leone, Liberia and the DRC. In addition, the new peacekeeping mission in Abyei has been mandated to provide security for oil infrastructure in the Abyei Area when necessary and in cooperation with the Abyei Police Service. However, as this latter role has not yet been tested, it is not covered within this report.

Lessons learned from these four cases indicate that the way peacekeeping operations have been mandated to address conflict risks from natural resources has been gradually expanding in scope and also becoming more sophisticated. From helping to enforce a national ban



UN Peacekeeping troops on patrol in Abyei

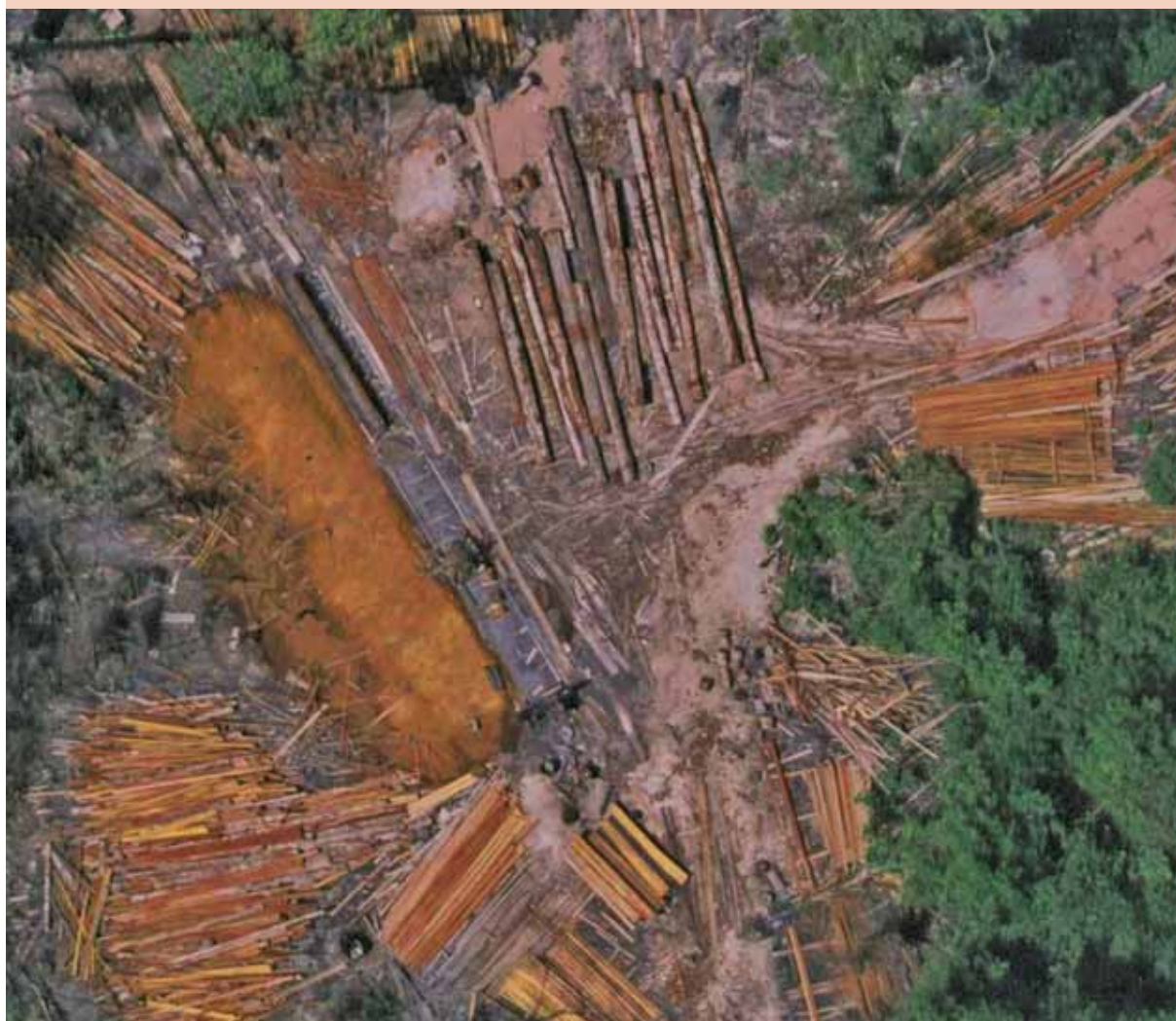
on the export of raw logs in Cambodia, to conducting joint police patrols in diamond zones in Sierra Leone, the mandate given to peacekeeping missions has been tailored to the specific context and steadily refined to reflect changing political and security conditions. At the same time, these cases also demonstrate that the successful implementation of the mandate given to peacekeeping operations is fundamentally influenced by the human and financial resources made available to them and by the political willingness of the host-country together with regional and global trading partners to tackle illegal exploitation and trade of natural resources.

Cambodia provides the first example where peacekeepers were mandated to take appropriate measures to secure the implementation of a national moratorium on the export of a specific natural resource. Logs from Cambodia were a major source of conflict financing. To implement

this mandate, aspects of monitoring and inspection – including investigations, border controls, and policing support – were performed by the mission to support the moratorium.

While these operations may have reduced the export of sanctioned logs, this case also demonstrates the limits of giving an overly narrow mandate to a peacekeeping mission. By focusing exclusively on logs, the peacekeeping mission was unable to prevent the Khmer Rouge from continuing to profit from sawn timber, rubies and sapphire mines as the mandate did not cover these specific natural resources (see Case Study 13). Nevertheless, the active role the peacekeeping mission attempted to play in supporting the national moratorium is a case of good practice and an important precedent in terms of monitoring and inspection to support embargoes against the export of specific natural resources.

Case study 13: Monitoring and inspecting extraction sites, supply lines and borders for sanctioned natural resources in Cambodia



Illegal sawmill in Pheapimex Kompong Thom logging concession, 2004

Cambodia's 1991 Paris Peace Accord failed to dislodge the Khmer Rouge from the resource-rich areas they controlled and prevent them from continuing to exploit and trade natural resources. Given the clear risks to peace, UNTAC in 1993 was given a mandate in Resolution 792 (1992) to take appropriate measures to secure the implementation of the Supreme National Council's moratorium on the export of logs from Cambodia in order to protect Cambodia's natural resources. Aspects of monitoring and inspection – including investigations, border controls, and policing support – were performed by the mission to support the moratorium.

In theory this was an appropriate measure since the Khmer Rouge was using timber exports to finance conflict. However this resolution had two major loopholes: first, as the moratorium only addressed round logs and not roughly processed timber, it resulted in the proliferation of sawmills across the country where logs were roughly sawn and legally exported, thereby circumventing the resolution. In the 1995 dry season, for example, overland exports of timber from Khmer Rouge-held territory to Thailand were earning the Khmer Rouge leadership USD 10-20 million per month. Second, the moratorium did not take effect immediately resulting in a logging frenzy before the deadline took effect.⁹⁵ In addition to these loopholes, the mandate failed to address other sources of conflict financing, such as from rubies and sapphires.

As a result, conflict and instability continued for seven years following the 1991 Paris Peace Accord fuelled by finances from natural resources. While the peacekeeping operation supported a successful election in 1993, a failure to address the lack of national capacity to effectively govern natural resources has continued to plague Cambodia, contributing to corruption, criminality and instability. This outcome demonstrates the importance of addressing natural resource governance in a comprehensive and timely manner from the outset of a peacekeeping mission, while ensuring sufficient coverage of all natural resources financing conflict.

Case study 14: Conducting joint planning, operations and patrols with police to monitor illegal natural resource extraction in Sierra Leone

Sierra Leone's civil war between 1991 and 1999 was also partially financed by revenues from natural resources, in particular the illegal exploitation and trade of rough diamonds. It is estimated that the Revolutionary United Front (RUF) sold between USD 25 million and USD 125 million of rough diamonds per year as a source of conflict financing.⁹⁶ Following the signing of the Lomé Peace Accord in 1999, a UN peacekeeping mission (UNAMSIL) deployed more than 17,000 peacekeepers to the country. However, the mission did not initially have a mandate from the Security Council to address the diamond trade, which continued to sustain ongoing conflict and undermine the peace process. One of the main reasons was that the vice president and former head of the RUF, Foday Sankoh, actively lobbied to prevent the mandate of the peacekeeping mission from addressing the diamond trade by appealing to the protection of national sovereignty and the right to self-determination. A 2000 report of the Secretary-General to the Security Council argued that "UNAMSIL has neither the mandate nor the intention to stop or interfere with any economic activity" and that the responsibility for natural resource exploitation lay entirely with the government, in particular "the Commission for the Management of Strategic Resources, Reconstruction and Development (CMSRRD) ... under the leadership of Mr Sankoh."⁹⁷

The first implication of this statement was that Mr Sankoh, although vice president and chair of the CMSRRD, continued to allow his RUF forces to exploit the diamond fields while violating human rights and national laws. The second implication was that the national government – rather than peacekeeping mission – should address this threat to peace. However, the situation changed dramatically following the sudden death of Mr. Sankoh in 2003. As a result, the Security Council mandated UNAMSIL in September 2004 "to support the Sierra Leone armed forces ... in patrolling the border and diamond mining areas, including through joint planning and joint operations where appropriate."⁹⁸

UNAMSIL delivered support and training to the Sierra Leone police on a number of topics, including illegal diamond mining. With the support of UNAMSIL, the police force in Sierra Leone established a diamonds crime intelligence and investigation unit, and initiated the recruitment of a UN civilian police diamond adviser. The newly trained police personnel were deployed to the provinces, focusing on areas vacated by UNAMSIL and the sensitive diamond-mining and border areas in the east of the country. UNAMSIL also provided advice to police in key specialized areas such as cross-border policing, airport security, criminal intelligence, policy and planning for diamond-related crimes. UNAMSIL also conducted joint patrols with the Sierra Leone police (Operation Blue Vigilance) to reassert its control over diamond mining. An immediate consequence was increased government control over the diamond-mining sector, a sharp rise in the issue of diamond-mining licenses and significant progress in the implementation of the Kimberly Process Certification Scheme.⁹⁹



Artisanal diamond mining in the forests on the outskirts of Freetown, Sierra Leone

Part 2: Addressing natural resource risks and opportunities

During the conflict in Sierra Leone between 1991 and 1999, it is estimated that the Revolutionary United Front (RUF) sold between USD 25 million and USD 125 million of rough diamonds per year as a source of conflict financing.¹⁰⁰ To the shock of many observers, the signing of the Lomé Peace Accord in 1999 placed the head of the RUF, Foday Sankoh, in the position of vice president and also as chairman of the Commission for the Management of Strategic Resources, Reconstruction and Development (CMSRRD). In this position, Mr Sankoh continued to allow his RUF forces to exploit the diamond fields while violating human rights and national laws. Mr Sankoh also actively lobbied to prevent the mandate of the peacekeeping mission (UNAMSIL) from addressing the diamond trade by appealing to the protection of national sovereignty and the right to self-determination.

The opportunity to restore full control over diamond areas occurred only following the sudden death of Mr Sankoh in 2003. As a result, in September 2004 the Security Council finally mandated UNAMSIL “to support the Sierra Leone armed forces ... in patrolling the border and diamond mining areas, including through joint planning and joint operations where appropriate.”¹⁰¹ An immediate consequence was increased government control over the diamond-mining sector, a sharp rise in the issue of diamond-mining licenses and significant progress in the implementation of the Kimberley Process Certification Scheme (see Case Study 14). The case demonstrates the value of conducting joint policing operations to restore state authority and prevent illegal resource exploitation.

Liberia offers an example where the UN peacekeepers were given the broadest mandate to date in relation to restoring the administration of natural resources. It also shows the limits of a mandate when a transitional government lacks the political will to support its full implementation.

Given the role that natural resources such as diamonds and timber also played in the Liberia conflict, the peacekeeping mission (UNMIL) was provided an explicit mandate in 2003 to “assist the transitional government in restoring proper administration of natural resources.”¹⁰² The mission’s original vision towards achieving this goal included institutional reform, capacity building and supporting the national transitional government of Liberia to re-establish control over natural resource sites including key mines, commercial forests concessions, rubber plantations, protected areas and border regions (see Case Study 15). These were considered core conditions for lifting the timber and diamond sanctions that had been imposed by the Security Council (see Case Study 19).

However, the lack of adequate political will at the national level together with an absence of troop deployments in

resource rich areas and along the borders allowed the continued exploitation of natural resources. While the mission was successful in assisting the transitional government to develop new resource management policies and provided training for government officials and police, it was unable to reassert control over key natural resource sites.

Despite this failure, UNMIL was involved in contributing to the political groundwork for one of the most important measures that did eventually help restore the administration of natural resource concessions and revenues: the Governance and Economic Management Assistance Programme (GEMAP). Adopted by the National Transitional Government of Liberia and Liberia’s international partners in September 2005, the GEMAP was a program of wide scope that targeted revenue collection, expenditure controls and government procurement and concession practices.

Following the election of Ellen Johnson Sirleaf and the installation of her new government in January 2006, the peacekeeping mission finally had a national partner with the political will to tackle natural resource challenges. The new president’s first executive order was to cancel all timber concessions that had been issued during the conflict and under the transitional administration citing a lack of transparency, equity and suitable terms for Liberia. UNMIL also started to fully engage in enforcement operations against illegal logging through a system of checkpoints and the establishment of a Forest Reform Monitoring Committee (FRMC), which included civil society. UNMIL trained, equipped and deployed 65 mineral inspectors and 46 mining agents to the interior of the country to institute the Kimberley Process Certification Scheme procedures. Major achievements were also accomplished in restoring the control of rubber plantations and protected areas. UNMIL also supported the full implementation of GEMAP.

This case holds two important lessons. First, peacekeeping mandates are always subject to national political will and cooperation with national security and police forces. Where national authorities choose to narrowly interpret a peacekeeping mandate, or actively undermine its implementation, there are limited options available to remedy the situation. In this case, the only solution was for the international community to impose GEMAP - as a condition for future cooperation and financing. The second lesson is that restoring administration over natural resources rested on four key pillars: extending State authority into illegally occupied sites and controlling border areas; bringing transparency to resource concessions and associated revenues; participating in international certification schemes; and involving civil society in key resource management policies and decisions.

Case study 15: Restoring the administration of natural resources and transparency of associated revenue management in Liberia



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UNMIL peacekeepers move in to secure Guthrie rubber plantation from ex-combatants who had illegally tapped rubber

In Liberia, UNMIL was given a broad mandate in Resolution 1509 (2003) to help the transitional government restore the administration of natural resources. While the mission was successful in assisting the transitional government to develop new resource management policies as well as provide training for government officials and police, it failed in one key aspect. Securing the control of key natural resource sites was not delivered while the transitional government was in power. This is because there was a lack of demand and political will from the transitional government, which intentionally understood a 'narrow' interpretation of the UNMIL mandate.¹⁰³ UNMIL was initially unable to deploy to diamond and timber-rich areas, particularly along Liberia's border regions with Côte d'Ivoire, Guinea and Sierra Leone. The result was a dramatic increase in illegal diamond mining activities, pit-sawing, and rubber extraction by a range of people, including members of the transitional administration, criminals and ex-combatants. The lack of adequate control of Liberia's borders also allowed cross border trafficking of illicit natural resources.¹⁰⁴

However, UNMIL was involved in contributing to the political groundwork for an important measure that did eventually help restore the administration of natural resource concessions and revenues: the Governance and Economic Management Assistance Programme (GEMAP). Adopted by the National Transitional Government of Liberia and Liberia's international partners in September 2005, the GEMAP was a program of wide scope that targeted revenue collection, expenditure controls and government procurement and concession practices. Its key features were the provision of international experts with co-signature authority in selected ministries and State-owned enterprises. It was an oversight mechanism designed to reduce corruption and increase transparency, including over natural resource revenues, and link to the peace implementation process as well as UN Security Council sanctions.¹⁰⁵

Case study 15: Continued



Liberian President Ellen Johnson Sirleaf speaks at inauguration of the headquarters of UNMIL

Following the election of Ellen Johnson Sirleaf and the installation of her new government in January 2006, UNMIL helped establish control over a number of priority resource extraction sites over the duration of the mission. For example, ex-combatants and rebels had occupied a number of major rubber plantations as well as Sapu National Park which they were exploiting illegally. The Sapu Working Group was established to evacuate and resettle the illegal miners, poachers, squatters and the traditional inhabitants and re-establish State control of the park. Similarly, the Liberian Rubber Plantation Task Force (RPTF) chaired by the Liberian President and the UNMIL Special Representative of the Secretary-General, convinced most ex-combatants to leave the plantations by renegotiating the takeover of the areas and providing alternative livelihood assistance.

In terms of diamonds, UNMIL trained, equipped and deployed 65 mineral inspectors and 46 mining agents to the interior of the country, to institute Kimberley Process Certification Scheme (KPCS) procedures, and built regional diamond offices using Quick Impact Project (QIP) funds to address key gaps in diamond management infrastructure. Particular attention was given to the Ministry of Lands, Mines and Energy's capacity to reinforce its internal controls system, as well as to foster mining communities' awareness of the Kimberley Process in order to curb illegal mining. UNMIL continues to help build capacity for Liberia to comply with the KPCS.

There were also renewed efforts to restore the administration of natural resources, including full implementation of GEMAP. The new president's first executive order was to cancel all timber concessions that had been issued during the conflict and under the transitional administration citing a lack of transparency, equity and suitable terms for Liberia. UNMIL also started to fully engage in enforcement operations against illegal logging through a system of checkpoints and the establishment of a Forest Reform Monitoring Committee (FRMC), which included civil society involvement.¹⁰⁶ UNMIL continues to help build national capacity to ensure current legislation and other reform efforts are contributing to the proper and transparent management of the sector's resources including the allocation and performance of large scale timber contracts, social agreements' performance for the benefit of forest-dependent communities, as well as the implementation of the Voluntary Partnership Agreement (VPA) - as part of the EU's Action Plan for Forest Law Enforcement, Governance and Trade (FLEGT).

UNMIL has closely supported government efforts in abiding by the Extractive Industries Transparency Initiative's (EITI) criteria and principles aimed at improving transparency and accountability in the mining, oil, forestry and agriculture sectors (see Box 4).

The peacekeeping operation in the DRC has faced some of the most difficult challenges of any peacekeeping mission in tackling the illegal trade of natural resources and the associated financing of armed groups. Since 2008, the Security Council authorized four main types of peacekeeping activities in the DRC to stem the flow of conflict resources and associated financing while regaining government control over mining sites.

First, the peacekeeping mission was mandated to work in cooperation with national authorities to monitor and inspect mineral consignments at transportation hubs. This was done in an attempt to curtail the provision of financial support to armed groups derived from illicit trade in natural resources. However, this effort largely failed due to a lack of human capacity and financial resources as well as poor cooperation by local authorities to enforce national laws. As a result, rebels and militia groups continued to maintain control over mining sites in the east using revenues to finance conflict in the region.

Second, the mission conducted joint security operations with the national army to extend State authority into the mining sites by dislodging militia groups. This worked temporarily, but it placed the national army in control of the mining sites rather than the government. Upon securing the mine sites, certain units within the Congolese army began exploiting the minerals themselves, in defiance of national law. The peacekeeping mission could do little to react, given that its mandate was limited to action against illegal groups – not the national armed forces.

Third, as both monitoring and inspection as well as reasserting State control over mining sites failed to stop the trade of conflict minerals, the Security Council then endorsed a clear set of due diligence obligations for businesses buying minerals from the DRC and surrounding countries. The essence of these standards is that companies must assess their minerals purchases against two sets of risks: 1) conflict financing (e.g.

benefiting rebel and army units in the DRC) and 2) human rights, e.g. that the mineral extraction process involves harms to people and violations of their rights (see Case Study 20).¹⁰⁷

Finally, in support of the due diligence standards, industry bodies and the Congolese government established traceability schemes to provide key information in demonstrating due diligence. In this regard, the peacekeeping mission was mandated to help national authorities set up five pilot trading centres: three for cassiterite and coltan, and two for gold. The centres are the first point of sale for minerals from mines that were not controlled by armed groups and which meet minimum labour and human rights standards. The centres also serve as commercial and taxation points for any minerals sold to trading houses for export. MONUSCO also trained 140 members of the Mining Police for deployment at six sites in Walikale territory supplying the centre de négoce of Isanga.

While the combination of efforts undertaken by the peacekeeping mission in the DRC have not been entirely successful, they have set important precedents in terms of approaches available to the UN Security Council to address conflict resources (see Case Study 16).

One lesson learned is that extending State control by the national army into high-value resource areas can have unintended consequences in situations where there is a weak chain of command, poor discipline, and limited government oversight. Another is that placing the onus on companies importing minerals from the DRC to carry out due diligence is a major innovation in terms of potentially stemming the flow of finances to armed groups. However, it will only be successful if the governments of countries where minerals are traded, processed and used in manufacturing incorporate these standards into national law, ensure that companies are applying them, and prosecute violators. At the same time, the potential consequences should be taken into account if companies decide to source minerals from other regions of the world.

Box 4: Extractive Industries Transparency Initiative

The EITI sets a voluntary global standard for revenue transparency in oil, gas, mining and in some cases forestry. It aims to strengthen governance by improving transparency and accountability in the extractives sector. Good governance in the exploitation of extractive resources can help generate large revenues to foster growth and reduce poverty. However, when governance is weak, it may result in poverty, corruption and conflict.

The EITI supports improved governance in resource-rich countries through the verification and full publication of company payments and government revenues from the extractive industries. The EITI is a coalition of governments, companies, industry associations, civil society groups, investors and international organizations.

To become an EITI Candidate, a country must meet five sign-up requirements. It then has 1.5 years to publish an 'EITI report' that reconciles what companies say that they pay in taxes, royalties and signature bonuses, with what governments say they have received. To achieve EITI Compliant status, a country must complete an EITI Validation. It provides an independent assessment of the progress achieved and what measures are needed to strengthen the EITI process. The validation is carried out by an independent validator, using the methodology set out in the EITI Rules.¹⁰⁸

Though the EITI was not created to deal with conflict resources, the fact that it deals with resource governance and corruption makes it a useful tool to address some of the underlying problems which could lead to conflict. However, a major challenge in the EITI is that it is a voluntary instrument, and the countries that probably most need to be part of it – those with the least transparency – are the least likely to want to join. In addition, it is likely to be ineffective in the context of a major conflict as extreme circumstances make it improbable that warring factions would sign up to or to abide by the EITI.¹⁰⁹ However, for post-conflict countries that are committed to transparency in governing resource revenues, the EITI is an important tool and an emerging global standard.

Case study 16: Reasserting government control over mining sites and improving oversight of trading centres for natural resources in the DRC



UN-backed trading centre in Isanga near Bisie, the DRC

The various conflicts in the DRC have been extensively financed and fuelled by natural resources, in particular revenues from gold, wolframite, coltan and cassiterite - minerals prized by the electronics industry and valued at around USD 60 million per year.¹¹⁰ A direct mandate was given to the peacekeeping mission in 2008 to “use its monitoring and inspection capacities to curtail the provision of support to illegal armed groups derived from illicit trade in natural resources.” However, there were 20 different and substantial mandated tasks for the mission including civilian protection, progressing the peace process, DDR and security sector reform. The reference to natural resources was task number 18 and, consequently, was not a priority on the ground for the mission. Moreover additional financial and troop resources were not provided to support this aspect of the mandate.

While limited monitoring and inspections of minerals consignments at transportation hubs in the Kivus were conducted, inadequate staffing and financing undermined the effectiveness of these efforts. They were also hampered by the fact that they had no law enforcement powers and often experienced difficulties in cooperating with their Congolese government counterparts when illegal exploitation and trade was identified. As a result, rebels and militia groups continued to maintain control over mining sites in the east using revenues to finance conflict in the region.

In 2009, the peacekeeping mission and the government adopted a two prong strategy to reassert control over mineral areas while improving the traceability of mineral products and restricting conflict minerals from international markets.

Under the strategy, the peacekeeping mission began assisting the Congolese army in a military operation which aimed to dislodge armed rebel groups from a number of mining sites, and in doing so diminish their resource base. The operations, known as Umoja Wetu (2009), Kimia II (2009) and Amani Leo (2010), succeeded in establishing control of the mining sites by the national army (FARDC) and securing mineral resources, but at significant cost.¹¹¹ Not only did the operation lead to human rights abuses and displacement, but one of the major unintended consequences of restoring control to the national army was that certain units within the army began exploiting the minerals themselves, in defiance of national law. MONUC could do little to react, given that its mandate was limited to action against illegal groups – not the national armed forces.

Case study 16: Continued

In an effort by the government to reassert its control over the mining sites, Joseph Kabila, President of the DRC, banned the production and trade of minerals in the Kivus and Maniema on 10 September 2010 and ordered a demilitarization of the mining zones. Unfortunately, this presidential measure did not end mineral smuggling nor military involvement in this activity. The failed ban was therefore lifted on 10 March 2011.

The second pillar of the strategy focused on preventing the flow of “conflict minerals” onto the raw materials market. This involved identifying the mines under the control of the armed groups, introducing a traceability mechanism to cover transfer from the mines to the trading counters, and requiring due diligence for companies purchasing minerals from the region. In this regard, the peacekeeping mission was specifically mandated by the Security Council to “consolidate and assess, jointly with the Government of the Democratic Republic of the Congo, its pilot project of bringing together all State services in five trading counters in North and South Kivu in order to improve the traceability of mineral products.”¹¹²

Based on the new mandate, the peacekeeping mission is helping national authorities set up five pilot trading centres: three for cassiterite and coltan, and two for gold. The centres are the first point of sale for minerals from mines that were not controlled by armed groups and which meet minimum labour and human rights standards. The centres also serve as commercial and taxation points for any minerals sold to trading houses for export. The centres are staffed by the DRC Mine Administration, mine police, civil servants and the State service charged with regulating informal mining activities (SAESSCAM).

An agreement was reached about the implementation of a validation process ensuring that only “clean” minerals are traded at the counters. In March 2011, a national forum on traceability and certification of commercialized minerals was organized and adopted several acts of engagement signed by relevant mining actors including the Governors of the Kivus and Maniema, artisanal miner representatives, trading counter holders and mineral traders, civil society, the holders of mining rights, transporters, and the local Congolese mining authorities. The peacekeeping mission has also trained 140 members of the Mining Police for deployment at six sites in Walikale territory supplying the negotiating centre. These efforts should help to support the application of due diligence guidelines in the DRC (see Case Study 20).



Members of the Forces Armées de la République Démocratique du Congo (FARDC) conduct patrol missions in the eastern areas of the country, with the support of the Indian battalion of the United Nations Organization Mission in the Democratic Republic of the Congo (MONUC), as part of the November 2007 Nairobi communiqué, 2008

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Together these four cases demonstrate that while peacekeeping missions have been given increasingly precise mandates to tackle natural resources that are financing and fuelling conflicts, they are always subject to the political will and economic interests of the host-country. Non-elected transitional administrations, or power sharing authorities, together with private sector actors may intentionally undermine peacekeeping efforts to restore authority in order to continue profiting from resource revenues. If host governments do not make combating the illegal exploitation of natural resources a priority, there is little leverage a peacekeeping mission can employ, despite the existence of a mandate, unless all international partners agree on the need for strong controls, such as GEMAP in Liberia or due diligence obligations on the private sector.

At the same time, complementary instruments such as commodity sanctions and Expert Panels that seek to exclude resources of a specific origin from global markets and monitor violations respectively should be utilized in a more coordinated manner. These two mechanisms are discussed in the following section.

Natural resources, sanctions, and Expert Panels

The use of sanctions by the UN Security Council is intended to apply pressure on a State or entity to comply with the objectives set by the Security Council without resorting to the use of force. Sanctions offer the Security Council an important instrument to enforce its decisions and can also be used to reduce the resources or capacities of their targets, thereby undermining their scope of action.¹¹³

The Security Council has resorted to sanctions as an enforcement tool to help maintain or restore international peace and security, often when other diplomatic efforts have failed. The range of sanctions has included comprehensive economic and trade sanctions or more targeted measures such as arms embargoes, travel bans, financial or diplomatic restrictions, asset freezes and the exclusion of specific commodities from global markets. Since the 1990s, the Security Council has increasingly used targeted sanctions or “smart sanctions” to focus their impact on leaders, political elites and segments of society believed responsible for threats to peace and security, while reducing collateral damage to the general population or trading partners. Secondary sanctions have also been considered (sanctions applied to States not complying with earlier resolutions) where credible evidence of embargo violations could be obtained.

To date, sanctions remain a controversial and imperfect policy instrument of the international community. The Security Council imposes sanctions, but nations must implement them. In some cases, sanctions can be met with resistance from some Member States as they may face a loss in their own trade revenues if sanctions are

applied. In other cases, countries may be willing to implement sanctions, but may lack the capacity to do so. Nations may not know that sanctions are being violated inside their territory because they cannot monitor their borders, or prevent corruption of customs officials.¹¹⁴ Still other nations may fundamentally disagree with the objectives of the sanctions, refuse to comply due to political alliances, or disagree on their meaning and interpretation. Where there is broad support for the application of sanctions, the Security Council should ensure they can be implemented, anticipate how they can be violated, and refrain from applying ones that are not enforceable.

Commodity sanctions are among the most powerful economic instruments at the disposal of the Security Council. Commodity sanctions have been used by the Security Council to restrict imports and trade of specific natural resources in order to stem the flow of conflict financing in five cases. These have included sanctions on logs in Cambodia, petroleum and diamonds in Angola, diamonds in Sierra Leone, timber and diamonds in Liberia, and diamonds in Côte d’Ivoire. A sixth case from the DRC also seeks to prevent armed groups from gaining access to resource revenues by the adoption of due diligence guidelines as discussed above (see Case Study 20). By restricting the trade of specific commodities of a particular origin, commodity sanctions send a clear message to governments, industry and consumers about what not to buy. They also demonstrate how the economic dimensions of regional and global trade can affect international peace and security and the violation of human rights.¹¹⁵

To oversee the implementation of sanctions by UN Member States, the Security Council establishes a sanctions committee. The sanctions committees are subsidiary bodies of the Security Council. Each Council member appoints a representative to sit on each committee and the committee chooses a chairman and vice-chairmen from among these representatives.¹¹⁶

At the field level, the Security Council also typically establishes a Panel of Experts (also known as Groups of Experts or Expert Panels). Expert Panels are small, civilian, fact-finding teams that advise on the scope, monitor the effectiveness, and report on the implementation of the sanctions on countries, individuals or groups who threaten peace and security.¹¹⁷ The Panels can also investigate violations of UN sanctions, as well as offer analysis on the nature of the conflicts, the exploitation of natural resources and the grounds for lifting sanctions. Expert Panels provide the Sanctions Committees of the Security Council and the full Council itself with extensive reports containing detailed evidence collected against sanctions violators while also making recommendations to put an end to illegal activities.¹¹⁸ In exceptional circumstances, such as the extensive exploitation of natural resources in the DRC, Expert Panels have also been established to advise on the potential scope of sanctions and to inform the mandate of a peacekeeping mission (see Case Study 17).

Case study 17: Using an Expert Panel to assess natural resource and conflict linkages in the DRC



The UN Security Council votes to extend the mandate of the Panel of Experts operating to monitor sanctions in the DRC

In 2000 a Security Council Presidential Statement mandated an Expert Panel “to follow up on reports and collect information on all activities of illegal exploitation of natural resources and other forms of wealth in the DRC, including violation of the sovereignty of that country.”¹¹⁹ Over the course of the next year, the Expert Panel monitored the trafficking of diamonds, timber, and of other valuable resources (such as coltan), and their trade for weapons. In 2001, the Panel published two reports which extensively documented how both government and private actors pillaged the DRC’s resources to fund war. The report stated that the conflict in the DRC related to the access, control and trade of coltan, diamonds, copper, cobalt and gold. The panel found that exploitation of natural resources by foreign armies had become systematic and systemic; and private companies trading minerals as ‘the engine of the conflict in the DRC’ prepared the field for illegal mining activities. “The only loser in ‘the huge business venture’ was the Congolese people,” the Expert Panel concluded.¹²⁰

Based on its findings, the Expert Panel recommended that the Security Council impose sanctions, including the import or export of coltan, cassiterite, gold, diamonds and timber, a weapons embargo on the entire DRC, a travel ban and assets freeze on those identified as contributing to conflict in the country. It also recommended that the Security Council extends the mandate of the Panel of Experts to allow it to conduct a follow-up investigation and report on the structures and networks put in place or facilitated by warring parties to illegally exploit the natural resources of the Democratic Republic of the Congo, including the situation after the withdrawal of foreign military forces.¹²¹

Based on its recommendations, the Council imposed an arms embargo and other targeted sanctions to stop the financing of rebel activity. However, explicit commodity sanctions were not imposed due to fears that sanctions on minerals could perpetuate insecurity in the country’s east and adversely affect the lives of people across the region that depend on mining for their livelihoods.

Once sanctions were in place, a new Group of Experts was appointed to monitor their implementation and advise on their possible expansion. Following extensive monitoring and investigations, the Group of Experts concluded in July 2007 that the sanctions had not affected the link between natural resource exploitation and the financing of rebel activity. It recommended that the Congolese authorities, together with international assistance, increase their institutional capacity to control and govern the country’s natural resources. This recommendation was considered in the revised mandate of the UN peacekeeping mission in 2008. The report also recommended that companies unable to demonstrate adequate due diligence practices in sourcing natural resources from conflict zones should be sanctioned.¹²² This latter recommendation eventually evolved into collaboration between the Group of Experts and the Organization for Economic Cooperation and Development (OECD) to establish a set of due diligence guidelines. The ‘Due Diligence Guidance for Responsible Supply Chain Management of Minerals from Conflict-Affected and High-Risk Areas’ designed by the OECD in close consultation with the Panel for the DRC aims to create a clean supply chain based on due diligence, including the collection of first-hand information on the militarization of mines, commercial activities and human rights issues (see Case Study 20 and Box 6).

Part 2: Addressing natural resource risks and opportunities

UN Expert Panels have been established in Angola, Sierra Leone, Liberia, the Democratic Republic of the Congo and Côte d'Ivoire to monitor the implementation of sanctions relating to natural resources, and identify individuals, companies and countries involved in sanctions violations (see Table 5). In this regard, Expert Panels have made a major contribution towards understanding how natural resources finance arms and armed groups, how illicit resources are traded both regionally and internationally, and how sanctions have curtailed conflict financing and illegal resource exploitation.

The critical role commodity sanctions have played in tackling conflict financing from natural resources in Angola, Sierra Leone and Liberia is also widely recognized.^{123,124} The importance of this role is further emphasized by the 2005 Security Council Resolution

1625 followed by the 2008 report on its implementation (see Box 5).

When sanctions involving natural resources are in place, peacekeeping missions do not have an automatic mandate to help monitor them, to prevent the export of sanctioned commodities or to cooperate with Expert Panels. These activities must be explicitly mandated by the UN Security Council. In this regard, the Security Council has been inconsistent in its directions to Panels and peace operations about their relationship. Not all UN peace operations have specific mandates to work with Panels, nor do all Panels have mandates to work with UN missions. In fact, only three peacekeeping missions have been given an explicit mandate to support the work of Expert Panels, including on natural resources: Liberia, Côte d'Ivoire and Democratic Republic of the Congo (see Table 6).

Table 5: Scope of Expert Panel Mandates that included Natural Resources¹²⁵

	Elements Monitored	Angola	Côte d'Ivoire	DRC	Liberia	Sierra Leone
Embargo	Arms	X	X	X	X	X
	Diamonds	X	X		X	X
	Timber				X	
	Petroleum	X				X
Freeze or ban	Assets freeze	X	X	X	X	
	Travel ban	X	X	X	X	X
	Civil aviation limits	X		X	X	X
Impact Assessment	Human Rights violations / child soldiers			X		
	Natural resource exploitation	X	X	X		X
	Progress toward security sector reform			X		
	Progress to effective resource management			X	X	X
	Socio-economic and humanitarian impact of sanctions		X		X	X

Table 6: Relationships between sanctions, expert panels and peacekeeping mandates

Country	Commodity Sanctions	UN Expert Panel	Peacekeeping mandate on natural resources	Peacekeeping mandate to support Expert Panels
Angola	Petroleum Diamonds	Yes	No	No
Cambodia	Logs	No	Take appropriate measures to secure the implementation of a moratorium on the export of logs.	N/A
Côte d'Ivoire	Diamonds	Yes	No	Yes
Democratic Republic of the Congo	Minerals	Yes	Use monitoring and inspection capacity capacities to curtail the provision of support to illegal armed groups derived from illicit trade in natural resources	Yes
Liberia	Diamonds Timber	Yes	Assist the transitional government in restoring proper administration of natural resources	Yes
Sierra Leone	Diamonds	Yes	Patrol the border and diamond mining areas, including through joint planning and joint operations where appropriate	No

Box 5: Implementing provisions of Security Council Resolution 1625 on natural resources and conflict prevention

Security Council Resolution 1625 (2005) reaffirms the need to adopt a strategy of conflict prevention, particularly in Africa, that addresses the root causes of conflict which includes “sustainable development, poverty eradication, national reconciliation, good governance, democracy, gender equality, the rule of law and respect for and protection of human rights.”¹²⁶ In particular, this resolution reasserts the Security Council’s “determination to take action against illegal exploitation and trafficking of natural resources and high-value commodities in areas where it contributes to the outbreak, escalation or continuation of armed conflict.”

In the 2008 report (S/2008/18) on the implementation of 1625, the Secretary-General recommends that the Security Council works to ensure “creative and constructive use of sanctions as a tool for conflict prevention and to use reports of Expert Groups to carry out lessons-learned endeavours in order to motivate parties to resolve conflict without resorting to violence.”¹²⁷ The Secretary-General further highlights the need for including the monitoring of armed groups in the mandates of peacekeeping missions and providing the appropriate resources in order to carry out the tasks. The use of sanctions, monitoring, and reporting are ways to increase transparency in the international private sector.¹²⁸ Additionally, the Secretary-General makes a call to strengthen the ability of the UN to “promote preventative diplomacy and mediations capability” and for the strengthening of the capacity of the UN Secretariat, especially the Department of Political Affairs, in order to analyse conflict situations and make recommendations for action.¹²⁹

Case study 18: Conducting field investigations on the violation of commodity sanctions to support a UN Group of Experts in Côte d'Ivoire



A diamond mine at Tortiya, Katiola in Côte d'Ivoire

A diamond embargo in Côte d'Ivoire was imposed by the Security Council in December 2005 through Resolution 1643 (2005). The diamond production areas are located in the north of the country and are mainly controlled by the Forces Nouvelles, the rebel group challenging the government at the time. The UN Group of Experts was also mandated by Resolution 1642 to analyse all relevant information in Côte d'Ivoire and elsewhere, in cooperation with the governments of those countries, on flows of arms and related material, on provision of assistance, and on the sources of financing, including from the exploitation of natural resources in Côte d'Ivoire.

While the peacekeeping mission (UNOCI) was not given an explicit mandate from the UN Security Council to address natural resource governance, it was mandated to support the UN Group of Experts. In this regard, UNOCI conducted an assessment of diamond mining in Côte d'Ivoire to supply important field information to the UN Group of Experts. During that investigation, UNOCI police and military observers helped the UN Group of Experts first to identify the most important diamond dealers in Séguéla, and then uncover how the diamonds embargo was being violated. The Group of Experts worked closely with the Civil Affairs, police and military branches of UNOCI, and travelled widely across Côte d'Ivoire.¹³⁰ This case demonstrates the important support that UN peacekeeping forces can give to UN Groups of Experts to support the monitoring of sanctions violations.

Peacekeeping missions have supported the natural resource work of Expert Panels in three main ways. First, they have provided basic logistical support and field level security. Second, they have conducted monitoring and inspections at border crossings and transit hubs to ensure sanctioned resources are not being exported. For example, the Joint Mission Analysis Centre (JMAC) within the peacekeeping mission in the DRC has helped to coordinate mission activities and to liaise with Expert Panels, drawing on their own monitoring of non-State armed groups with links to illegal exploitation of natural resources. Finally, they have conducted field assessments and provided information to Expert Panels on individuals or groups that are violating sanctions together with intelligence on zones of insecurity and illegal trafficking or exploitation of natural resources. The case of the Côte d'Ivoire demonstrates effective collaboration between peacekeeping missions and Expert Panels to determine the source of and actors involved in illegal resource exploitation (see Case Study 18).¹³¹ However, it is important to note that even where peacekeeping missions support the work of an Expert Panel, they can only implement the recommendations contained in Expert Panel reports when they are (i) accepted by the Security Council and (ii) formally mandated to the peacekeeping operation. Cooperation between peacekeeping operations and Expert Panels does not imply direct implementation of their findings.

A number of reports have called for improved coordination and cooperation between Expert Panels and peacekeeping missions.^{132,133} Drawing on the comparative advantage of each might benefit the work of both and help to improve the enforcement of sanctions. The main impediment to increased cooperation is that peacekeeping missions have neither received adequate resources (human and financial) nor a clear mandate to provide systematic support. Also, there are potential areas where the impartiality of a peace operation could be jeopardized by its role as a sanctions monitor or enforcer.¹³⁴ The UN Security Council needs to better understand the potential for improved collaboration, as well as the normative, political and operational challenges of encouraging such joint support.

At the same time, while greater cooperation with Expert Panels may be beneficial to peacekeeping missions in some cases, it is not sufficient to stop the violation of commodity sanctions. As Expert Panels typically consist of only four to six individuals, they simply do not have sufficient field presence to effectively monitor and verify exports on the ground. They can act as a deterrent for countries, companies and individuals that do not want to be named and shamed by Expert Panel reports, they can investigate links between armed groups and natural resources, and they can advise on the scope of peacekeeping mandates, but they are no substitute for more regular monitoring and inspection that could be conducted by a peacekeeping mission.

In this regard, there is an absence of existing operational guidance on sanctions enforcement and peacekeeping.

For example, while the Handbook on UN Multinational Peacekeeping Operations (2003) says that “the enforcement of sanctions authorised by the Security Council, particularly arms and material embargoes, may be tasked to a military component of a peacekeeping operation”, there is no operational guidance on how this should be conducted.¹³⁵ The 2008 UN Peacekeeping Operations: Principles and Guidelines” (known as the Capstone Doctrine) does not include a reference to embargoes and sanctions enforcement or monitoring nor does it discuss support to UN Expert Panels.¹³⁶ As a result many military and civilian peacekeepers are not trained to monitor sanctions, carry out customs duties, or systematically recognize, record and share information with police and customs officials on illicit products.¹³⁷

If peacekeeping operations are given a greater role in supporting Expert Panels and directly supporting national governments in sanctions enforcement, they will also need to consider recent lessons learned in the design and implementation of commodity sanctions. These lessons include: anticipating shifts in resource financing by armed groups; understanding the potential unintended consequences and economic impact on local livelihoods; addressing national capacity compliance challenges; and using the existence or threat of commodity sanctions as an incentive to conduct resource management reforms.

With respect to shifts in resource financing, Liberia offers a good example. When sanctions were imposed by the Security Council on diamonds, the Taylor government switched its financing source to timber. The Security Council then had to pass new sanctions against timber in order to stem all flows of conflict financing from natural resources (see Case Study 19). In situations where armed groups are financing their operations with natural resource revenues, all potential revenue streams should be monitored in order to detect possible shifts caused by sanctions.

Research into the potential impact of sanctions on natural resources in the DRC suggests that poorly directed sanctions can have a major impact on local livelihoods leading to insecurity. A 2009 report funded by the UK Department for International Development argued that sanctions on minerals could perpetuate insecurity in the country's east and adversely affect the lives of one million people across the region that depend on mining for their livelihoods.¹³⁸ In this case, an alternative approach was adopted. Rather than restricting all trade of specific commodities, only companies unable to demonstrate adequate due diligence practices in sourcing natural resources from conflict zones should be sanctioned (see Case Study 20). This focus on due diligence is a major innovation and possible alternative to blunt sanctions. However, to be effective, governments of countries where minerals are traded, processed and used in manufacturing should incorporate these standards into national law, ensure that companies are applying them, and prosecute violators.

Case study 19: Expanding, monitoring and lifting natural resource sanctions in Liberia



The Oriental Timber Corporation in Liberia was closed by the UN after sanctions were placed on the Liberian timber trade in 2003. Its owner Gus Kouwenhoven was later found guilty of arms trafficking in his native Holland

In 1991, Liberian warlord Charles Taylor sponsored the invasion of Sierra Leone by the rebel Revolutionary United Front (RUF). Taylor was motivated by a desire to control the lucrative Sierra Leonean diamond fields and reportedly earned some USD 100 million a year in revenue from the illicit trade.¹³⁹

In March 2001 the Security Council responded to the role of the illegal diamond trade in financing the RUF and Charles Taylor by imposing sanctions on diamond imports from Liberia in Resolution 1343. Liberia-registered aircrafts were also grounded until registration and ownership was validated, and 'conflict diamonds' were designated contraband on world markets.

The sanctions prompted Taylor to switch to Liberian timber as a funding source.¹⁴⁰ Although it took nearly two years, in May 2003 the commodity embargo was extended to include round logs and timber products by the Security Council in Resolution 1478. The Council cited Liberia's active support of RUF in Sierra Leone and the government's lack of compliance with UN Security Council Resolution 1343 (2001) as reasons for the extension of the sanctions.

About six months later, the Security Council passed Resolution 1521 (December 2003) which revised the goals of the commodity and the other sanctions to include supporting the implementation of the peace agreements. A specific requirement before lifting of the sanctions on diamond exports was that Liberia must join the Kimberley Process Certification Scheme. Similarly, the timber sanctions would only be lifted once the Government of Liberia could establish its full authority and control over the timber producing areas, and take all necessary steps to ensure that government revenues from the Liberian timber industry are not used to fuel conflict but rather for legitimate purposes for the benefit of the Liberian people. The idea behind this was to allow the government to control the country's foreign trade and generate needed tax revenue for State operations.

The timber ban was lifted on 20 June 2006 in Resolution 1689 after a series of major forest management reforms. These included Executive Order No. 1, which declared all existing forest concessions null and void, the drafting of new forestry laws and regulations, full participation in the GEMAP process including an internationally-recruited financial controller, and the establishment of a Forest Reform Monitoring Committee (FRMC), which included civil society involvement (see Case Study 15).¹⁴¹ However, the resolution included an interesting innovation whereby the sanctions would be reviewed after 90 days and reinstated if the new draft forestry laws had not been approved by that time. This provided a major incentive to continue with the forest reform process and keep up the political pressure for the restructuring of Liberia's logging industry.¹⁴²

Diamond sanctions were lifted in 2007 by Resolution 1753 only after Liberia joined the Kimberley Process Certification Scheme and complied with the Kimberley Process.¹⁴³ After the sanctions were lifted, the Expert Panel's mandate was extended to further monitor progress towards to effective resource management (see Case Study 21).

Case study 20: Establishing due diligence requirements for companies on sourcing minerals from the DRC

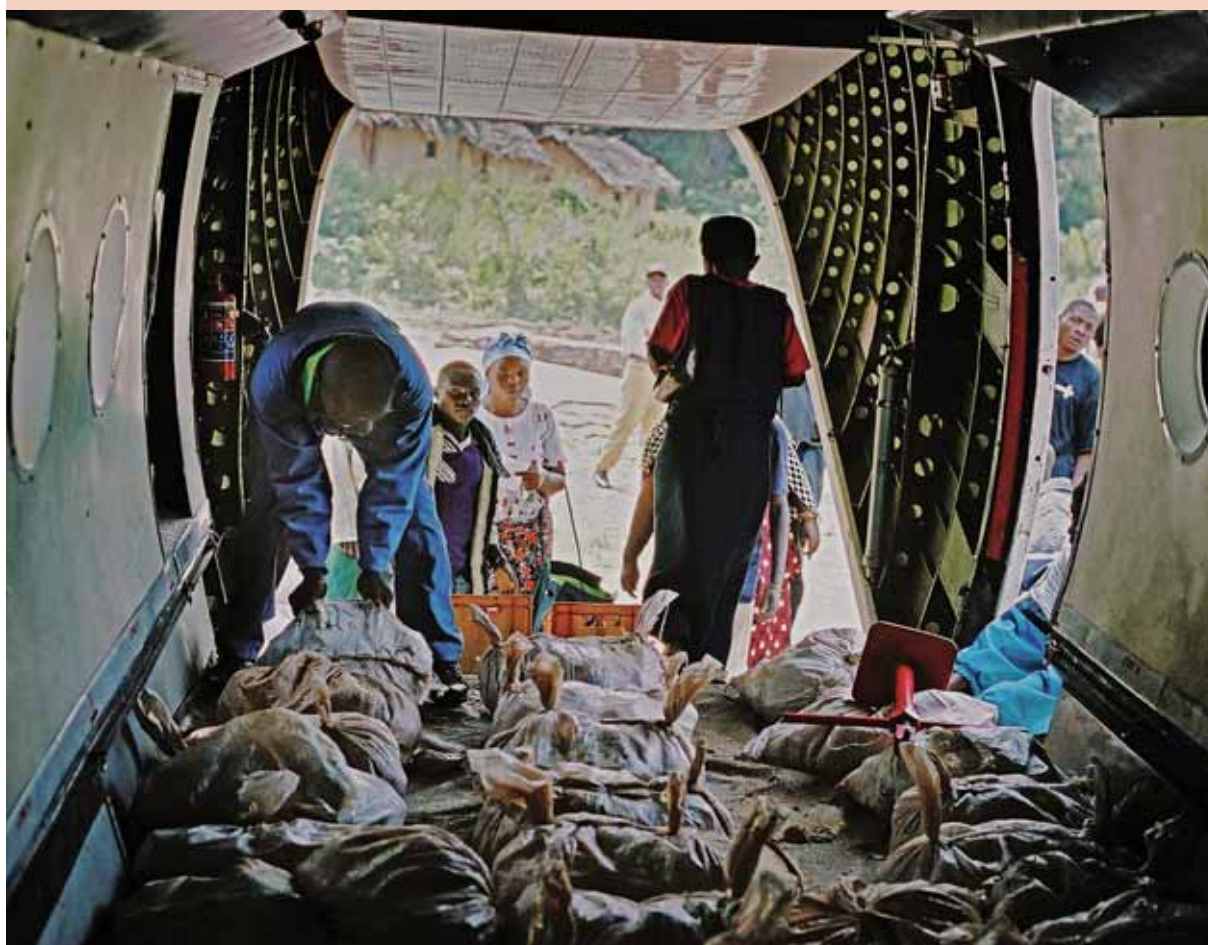
Due diligence is an ongoing proactive and reactive process by which companies ensure they do not contribute to conflict, and that they respect human rights, observe international law, and comply with UN sanctions as well as domestic laws, including those that govern illicit trade in minerals.¹⁴⁴

A due diligence approach to limiting conflict financing to armed groups has been tested in the DRC based on the recommendations of the Group of Experts. Resolution 1857 (2008) included some explicit language on due diligence for the first time in the history of the Security Council: “the Security Council encourages Member States to take measures, as they deem appropriate, to ensure that importers, processing industries and consumers of Congolese mineral products under their jurisdiction exercise due diligence on their suppliers and on the origin of the minerals they purchase.”¹⁴⁵ In other words, States should make sure that companies based in their jurisdictions are not violating the sanctions through their transactions or business relationships.

The follow-up Resolution 1896 (2009) on sanctions and the DRC, passed on 30 November 2009, reinforces these measures and goes even further. The Council instructed the Group of Experts to ‘produce... recommendations to the (Sanctions) Committee for guidelines for the exercise of due diligence by the importers, processing industries and consumers of mineral products regarding the purchase, sourcing (including steps to be taken to ascertain the origin of mineral products), acquisition and processing of mineral products from the Democratic Republic of the Congo’.

It also ‘recommends that importers and processing industries adopt policies and practices, as well as codes of conduct, to prevent indirect support to armed groups in the Democratic Republic of the Congo through the exploitation and trafficking of natural resources’.¹⁴⁶

The Security Council’s linking of sanctions implementation and ‘due diligence’ by international companies recognises that private sector operators are one of the principal entry points for conflict resources to the global economy. By encouraging States to require companies to detect where their activities and relationships might negatively affect human rights or help to fuel conflict, the Council is reflecting and reinforcing the consensus reached at the UN Human Rights Council concerning the nature of business responsibility for human rights.¹⁴⁷



Sacks of tin ore loaded onto a plane near Bisie. Companies sourcing minerals from eastern Congo must now carry out comprehensive supply chain due diligence in line with international standards

Case study 20: Continued



Cassiterite, also known as raw tin ore, is one of the major conflict minerals included in international due diligence guidelines

More specifically, the UN Secretary-General's Special Representative for Business and Human Rights, John Ruggie, advocates that it is the responsibility of companies to conduct business in a manner that does not harm the rights of others, and that due diligence is the principal means of fulfilling this responsibility. The Special Representative argues that due diligence is about companies 'knowing and showing' that they are respecting human rights. Failure by companies to carry out supply chain due diligence can damage their reputations and carries a risk of liability.¹⁴⁸

On 29 November 2010 the UN Security Council passed a new Resolution 1952 in which it responded to sets of proposals from the UN Group of Experts on Congo on the standards of due diligence that companies sourcing minerals from the region should be required to meet. The Security Council opted to back due diligence standards aimed at preventing companies' purchases from benefiting not only "illegal armed groups" and individuals and entities on the UN sanctions list, but also "criminal networks and perpetrators of serious violations of international humanitarian law and human rights abuses, including those within the national armed forces."¹⁴⁹

The UN due diligence guidance supported by the Security Council consists of five elements: (i) strengthening company management systems; (ii) identifying and assessing supply chain risks; (iii) designing and implementing strategies to respond to identified risks; (iv) conducting independent audits; and (v) publicly disclosing supply chain due diligence and findings.¹⁵⁰

In its guidance on identifying and assessing risks in the supply chain, the Group of Experts distinguishes between the responsibilities of 'upstream' companies, meaning ones that extract, trade or process minerals ores and 'downstream' companies that use processed metals. In the case of upstream companies, the emphasis is on carrying out on-the-ground assessments aimed at determining where exactly the minerals they use are mined, traded, handled and exported and the risks of their purchases benefiting the warring parties, human rights abusers or people subject to sanctions. Downstream companies, meanwhile, should focus their risk assessment on an evaluation of the due diligence controls put in place by the smelters that refine the metals that they use.¹⁵¹ These due diligence guidelines are consistent with broader guidelines adopted by the OECD (see Box 6).

Box 6: OECD Due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas

At the end of 2009, the Organisation for Economic Cooperation and Development (OECD) convened a working group of governments, companies, NGOs and other participants to develop guidelines on due diligence for companies sourcing minerals from conflict affected regions.

Building on lessons from the DRC, the OECD adopted Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas in December 2010.¹⁵² The Guidance includes measures to evaluate and mitigate risks and in some cases requires companies to disengage with suppliers if the risks are too great. The OECD Guidance places emphasis on need for companies in the 'upstream' part of the supply chain – meaning firms involved in mining, trading and smelting mineral concentrate – to carry out a comprehensive process of checks on their supply chains when sourcing from conflict-affected regions. These checks include tracing minerals to the mine of origin and undertaking on the ground risk assessments to gauge the risk of involvement or benefiting of abusive armed groups. Implementation of the Guidance will be audited at the smelter level – a minerals choke point in the international trading system as there is a relatively small number of smelters. The OECD guidance also seeks to set out ways in which downstream firms (manufacturers) can trace metals they use by finding the smelter that refined them and getting the relevant information from them. The principles have been endorsed by the 11 African nations of the International Conference of the Great Lakes Region.¹⁵³

The standards set by the OECD could help significantly reduce the trade in conflict minerals. The question now is the extent to which companies can be persuaded or compelled to abide by them. One way of ensuring this is by effective international monitoring and public reporting on compliance. Countries and regional bodies should also pass these due diligence standards into law.

One recent example of a national effort to improve corporate due diligence for companies operating in the DRC and the region is the Dodd Frank Wall Street Reform and Consumer Protection Act: H.R. 4173 – 111th. With the passage of this bill, Legislators in the US Congress are playing an important role in efforts to tackle the links between commerce and conflict in Congo by including provisions concerning conflict minerals and due diligence. These require all companies that are registered with the official regulator, the Securities and Exchange Commission (SEC), and whose products contain cassiterite, coltan, wolframite or gold, to disclose whether these minerals originate from Congo or adjoining countries.

Those firms whose products do contain minerals of these types originating from the Great Lakes Region must submit annual reports to the SEC. These reports need to set out the due diligence measures the companies have taken, the smelters that processed the minerals and the companies' efforts to determine the mine of origin. They also need to contain a description of any products which are not "DRC conflict free", i.e. products that contain conflict minerals. These reports to the SEC must be subject to an independent private sector audit and the companies must publish the information that they contain on their websites.¹⁵⁴

Ultimately, when sanctions are imposed by the Security Council, including on commodities, the most critical aspect of effective implementation is compliance by UN Member States. Unfortunately, many post-conflict governments lack the capacity to prevent illegal resource exploitation and export, while some countries are also directly and intentionally involved in sanctions violations. Unfortunately, the problems plaguing sanctions implementation in conflict-affected countries are often circular: "inadequate institutions beget ill-equipped law enforcement mechanisms, which weaken governmental control over its territories, decreases stability, and increases the challenges facing the institutions that are too poorly resourced to deal with the country's problems in the first place. Such instability in one country, furthermore, can rebound to volatility throughout the region".¹⁵⁵ In situations where there is insufficient national capacity for monitoring and enforcing sanctions, peacekeeping missions together with UN country teams may need to consider providing the required support.

At the same time, the UN itself does not have a systematic way of tracking or cataloguing Member State actions to implement sanctions. Only a few countries make their compliance record publicly available, while many simply lack the capacity to take any action, let alone report. Furthermore, there appear to be few repercussions when nations do not cooperate. For example, in 2004, the Sanctions Committee on Liberia sent a note verbale to all Member States, requesting information on steps they had taken to implement the sanctions, including those on timber and diamonds. As of late 2007, only 17 Member

States had responded.¹⁵⁶ Formulating a more systematic policy for prosecuting sanction busters and building national capacity for enforcement is a necessary step to improving the efficiency of sanctions regimes.

Finally, in addition to restricting conflict financing to individuals or groups, the existence or threat of sanctions can have another positive consequence. They can compel post-conflict governments and their international partners to undertake reforms in the natural resources sector. For example, the timber and diamond sanctions in Liberia were not lifted until the government could demonstrate that it had passed new laws to govern these sectors. The resolution lifting the timber sanctions included an interesting innovation whereby the sanctions would be reviewed after 90 days and reinstated if the new draft forestry laws had not been approved by that time. This provided a major incentive to continue with the forest reform process and keep up the political pressure for the restructuring of Liberia's logging industry.¹⁵⁷ As UNMIL was mandated to assist in restoring proper administration of natural resources, it also played a key role in establishing the basic capacity and conditions for the sanctions to be lifted. The Expert Panel for Liberia also played an important role in monitoring the embargoes on weapons, diamonds, and timber, and eventually recommending when the sanctions should be lifted. Although the timber and diamond sanctions against Liberia were lifted in 2006 and 2007 respectively, the Security Council maintained the Expert Panel to monitor the progress in implementing resource management reforms (see Case Study 21).

Case Study 21: Using an Expert Panel to monitor natural resource governance reforms both during and after commodity sanctions in cooperation with the peacekeeping mission in Liberia



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After sanctions were lifted in Liberia, the UN Expert Panel's mandate was extended to further monitor progress towards effective resource management

Over a five year period, the Expert Panel in Liberia monitored the embargoes on weapons, diamonds and timber. In close technical collaboration with UNMIL, it eventually recommended when the sanctions should be lifted and how to improve governance in those sectors.

When the timber and diamonds sanctions against Liberia were lifted by the Security Council in 2006 and 2007 respectively, the Expert Panel's mandate was extended to further monitor progress towards effective resource management. This created a strong incentive for supporting the emerging regulatory regime, with an implied threat of sanctions being reimposed if resource management reforms were not implemented. In 2007, the Expert Panel reported on the implementation progress in the Governance and Economic Management Assistance Program, including on natural resource concessions, revenues and associated institutional capacities. From 2007 to 2011, the Expert Panel reported to the Security Council on the Government of Liberia's implementation of the Kimberley Process Certification Scheme and the National Forestry Reform Law. In 2010, the Panel also reported on the contribution of forestry and other natural resources to peace, security and development within the context of the country's evolving legal framework. This model could be applied on a more systematic basis where post-conflict countries or fragile States lack the basic capacity to govern their natural resources, and would benefit from independent monitoring of illicit activity, institutional reforms and associated threats to peace.

In many conflict affected countries, there may be some perceived urgency in lifting UN commodity bans in the immediate post-conflict period, in order to provide much needed jobs and government revenues from resource concessions and legal exploitation. However, experience from Liberia, Sierra Leone and other countries demonstrate that sanctions should remain in place until the conditions that led to criminalized and conflict-financing resource exploitation have been genuinely transformed.^{158,159} Allocation of mineral or timber concessions before any of the regulatory checks and balances are in place can lead to corruption and can lock host countries into unfair deals with predatory companies that last for decades. Building a sustainable

and appropriately regulated and transparent natural resource sector takes time but the long-term payoff more than outweighs any short-term revenues post-conflict governments are likely to obtain. In this regard, the Natural Resource Charter initiative (see Box 7) together with the UN Guiding Principles on Business and Human Rights (see Box 8) may offer a series of principles for governments and societies to best harness the opportunities created by natural resources while not contributing to the violation of human rights. In the coming years, these initiatives may offer important sources of policy guidance and best practices to post-conflict countries in the development of their natural resource sector.

Box 7: The Natural Resource Charter Initiative

The Natural Resource Charter is a set of principles to guide governments and societies in their use of natural resources so that economic opportunities result in maximum and sustained returns for citizens. The Charter provides the tools and knowledge necessary for governments and civil society groups to avoid the mismanagement of diminishing natural riches and ensure the realization of their benefits now and in the future. The Charter is not a list of prescriptions or conditions designed to provide a checklist of conditions. It does not provide a blueprint for the institutions countries need to build to effectively harness their natural resource wealth. Instead it provides 12 general precepts around which such institutions can be designed and measured against.

- Precept 1:** The development of a country's natural resources should be designed to secure the greatest social and economic benefit for its people. This requires a comprehensive approach in which every stage of the decision chain is understood and addressed.
- Precept 2:** Successful natural resource management requires government accountability to an informed public.
- Precept 3:** Fiscal policies and contractual terms should ensure that the country gets full benefit from the resource, subject to attracting the investment necessary to realize that benefit. The long-term nature of resource extraction requires policies and contracts that are robust to changing and uncertain circumstances.
- Precept 4:** Competition in the award of contracts and development rights can be an effective mechanism to secure value and integrity.
- Precept 5:** Resource projects can have significant positive or negative local economic, environmental and social effects which should be identified, explored, accounted for, mitigated or compensated for at all stages of the project cycle. The decision to extract should be considered carefully.
- Precept 6:** Nationally owned resource companies should operate transparently with the objective of being commercially viable in a competitive environment.
- Precept 7:** Resource revenues should be used primarily to promote sustained, inclusive economic development through enabling and maintaining high levels of investment in the country.
- Precept 8:** Effective utilization of resource revenues requires that domestic expenditure and investment be built up gradually and be smoothed to take account of revenue volatility.
- Precept 9:** Government should use resource wealth as an opportunity to increase the efficiency and equity of public spending and enable the private sector to respond to structural changes in the economy.
- Precept 10:** Government should facilitate private sector investments at the national and local level for the purposes of diversification, as well as for exploiting the opportunities for domestic value added.
- Precept 11:** The home governments of extractive companies and international capital centres should require and enforce best practice.
- Precept 12:** All extraction companies should follow best practice in contracting, operations and payments.

The Natural Resource Charter was drafted by a panel of international experts on natural resources and development. The Charter is not politically affiliated and is designed to be a living document reflecting inputs from policy makers, civil society groups and interested individuals. As a living document, the Charter will change as international best practice evolves. The Natural Resource Charter can be downloaded at: <http://www.naturalresourcecharter.org/>

Re-establishing livelihoods for former combatants using natural resources

Following the end of conflict, a major challenge to improving human security and establishing sustainable peace in post-conflict countries is reintegrating former combatants back into society – many of whom are used to making a living through violence. This involves efforts to help ex-combatants break from the roles and activities that defined them during the conflict towards identifying themselves as citizens and returning to community life.¹⁶⁰ As this section will demonstrate, access to and ownership of land and natural resources often play a critical role in this process.

The term ‘DDR’ is defined by the UN as a process that deals with the post-conflict security problem that arises when combatants are left without livelihoods and support networks during the vital period stretching from conflict to peace, recovery and development. DDR seeks to increase security and contribute to enhancing stability in order to lay the foundations for recovery and long-term development by ensuring that ex-combatants and those associated with armed forces and groups (including women, children, disabled combatants and youth who provide support services) are successfully able to re-engage in civilian life (see Box 9). This process

is essential to lower the risk of relapse into conflict and reduce the likelihood that ex-combatants may be re-recruited into armed groups.¹⁶¹

Box 8: The UN Guiding Principles on Business and Human Rights

In June 2011, the UN Human Rights Council endorsed a new set of global guiding principles for business designed to ensure that companies do not violate human rights in the course of their transactions and that they provide redress when infringements occur. The Guiding Principles for Business and Human Rights outline how States and businesses should implement the UN “Protect, Respect and Remedy” Framework in order to better manage business and human rights.¹⁶²

The framework is based on three pillars – the State duty to protect against human rights abuses by third parties, including business, through appropriate policies, regulation and adjudication; the corporate responsibility to respect human rights, which means avoiding infringing on the rights of others and to address adverse impacts that occur; and greater access by victims to effective remedy, both judicial and non-judicial.¹⁶³



A peacekeeper takes stock of weapons collected during demobilization process in North Kivu, DRC

National DDR programmes are supported through collaboration between the peacekeeping mission and other UN agencies with relevant expertise. In most peacekeeping contexts, the UN peacekeeping mission is responsible for the disarmament and demobilization of former combatants and associated groups, while UNDP will take primary responsibility for reintegration assistance in conjunction with other UN development actors and agencies. The reintegration phase of DDR is not covered by the budget of the UN Peacekeeping Mission, but rather is funded through donor contributions and through the various agencies providing implementation support.¹⁶⁴

Due to its political and symbolic nature, the success or failure of a DDR process often sets the tone for subsequent peacebuilding and recovery efforts. The importance of DDR programmes to peacekeeping is clear. In a study of peace agreements concluded between 1980 and 1997, the demobilization and reintegration of combatants was found to be the single most important sub-goal of peace implementation.¹⁶⁵ The success or failure of DDR programmes fundamentally affected the implementation of other provisions of the peace agreement as well as prospects for maintaining peace and security in the following period. Similarly, another key lesson learned is that the way natural resources are managed in a post-conflict context has important implications for the success or failure of DDR efforts.¹⁶⁶

DDR phases are rarely linear and often involve overlapping and parallel security, political, developmental and humanitarian factors – and in many cases occur in close coordination with security sector reform (SSR). In such contexts, the presence of poorly governed natural resources can be a barrier to successful DDR programmes. When decent employment opportunities do not materialise, experience has shown that ex-combatants can become frustrated and resort to activities such as illegal exploitation, trade and taxation of natural resources combined with other illicit activities such as smuggling, drugs or weapons trafficking. These

activities can have potentially destabilising effects locally, nationally and regionally.^{167,168} DDR efforts in Liberia have illustrated both the risks and opportunities that natural resources represent for employment opportunities for ex-combatants. Liberia's most recent DDR programme began in 2003, following the 14-year civil war. By 2004, an estimated 101,000 ex-combatants had been disarmed and demobilized. However, several "reintegration hotspots" remained, many of them areas with weak State authority where ex-combatants and other youth at risk were engaged in illegal exploitation of natural resources as a means of livelihood.

For example, in Liberia unemployed ex-combatants took control of two large rubber plantations, Guthrie and Sinoe, and began commercial rubber production using their former rebel command structures (see Case Study 15). The rubber generated significant revenues for these ex-combatants, making it difficult to attract them into formal forms of employment.¹⁶⁹ Due to the potential economic benefits associated with natural resources, some commanders may even seek political appointments to legitimize their role in continued resource exploitation.

In 2006, the Liberian Government and the UN responded by forming the Liberian Rubber Plantation Task Force (RPTF) chaired by the Liberian President and the UNMIL Special Representative of the Secretary-General. In response to the RPTF's initial report on the situation, the President requested the RPTF to re-establish State authority in rubber plantations occupied by ex-combatants and curtail other illegal activity. UNMIL's role was to ensure security in and around the plantations in question; support the Government in the process of negotiation with illegal occupants; coordinate and encourage socio-economic interventions to consolidate the transitions in and around the plantations; and coordinate related UN efforts. The RPTF convinced most ex-combatants to leave the plantations by renegotiating the takeover of the areas and providing alternative livelihood assistance. The formalization

Box 9: What is Disarmament, Demobilization and Reintegration or DDR?

Disarmament is the collection, documentation, control and disposal of the small arms, ammunition, explosives and weapons of combatants and often the civilian population. Disarmament also includes the development of responsible arms management programmes.

Demobilization is the formal and controlled discharge of active combatants from armed forces or other armed groups. The first stage of demobilization can extend from the processing of individual combatants in temporary centres to the massing of troops in camps designated for this purpose (cantonment sites, encampments, assembly areas or barracks). A transitional process of assistance, termed reinsertion, is offered to ex-combatants during demobilization but prior to the longer term process of reintegration. This assistance helps cover the basic needs of ex-combatants and their families and can include allowances, food, clothes, shelter, medical services, short-term education, training and employment and can last for up to one year.

Reintegration is the process by which ex-combatants acquire civilian status and gain sustainable employment and income. Reintegration is essentially a social and economic process with an open time frame, primarily taking place in communities at the local level. It is part of the general development of a country and a national responsibility, and often necessitates long-term external assistance.^{170,171,172}

of the plantations, for which the Government signed concession agreements with various private companies, provided job opportunities for ex-combatants and community members alike and helped the development of the concession areas. UNMIL continues to follow up with the Government to support the establishment of consultative mechanisms to address emerging social issues in concessions with a view to consolidate the gains of the RPTF (see Case Study 15).

In other cases, former combatants that are integrated within national armies may continue to exert control over resource-rich areas in order to continue profiting from their illegal exploitation. In the DRC, for example, a report by the Group of Experts monitoring UN sanctions in the Democratic Republic of the Congo has implicated former CNDP (Congrès National pour la Défense du Peuple) soldiers, now part of the FARDC (Congolese Armed Forces), in the illegal exploitation of mineral resources in eastern Congo. The report says that units of the former CNDP in FARDC have gained military control over many of the strategic areas rich in natural resources in the Kivus, presenting a challenge to their integration into FARDC and to resource governance in the region (see Case Study 16).^{173,174}

Apart from risks represented by natural resources to DDR programmes, they are also critically important as the foundation for emergency employment and sustainable livelihoods for former combatants. In general, there are four main sectors where both the reinsertion and reintegration phases of DDR have directly or indirectly involved natural resources: repair of infrastructure (energy, water and waste), environmental rehabilitation, agriculture and bio trade and protected areas.

Restoring infrastructure can be a critical component of emergency employment as well as the foundation for economic recovery. A focus on infrastructure repair and rehabilitation projects in the energy, water and waste sectors during the reinsertion process of DDR programmes can provide ex-combatants with structured, low-skilled employment opportunities. Similarly, environmental rehabilitation programmes such as reforestation, restoration of rivers and watersheds, recovery of agricultural areas, and the removal/recycling of waste can be made into labour-intensive public works.

For example, in Sudan, a partnership with a private recycling company has been developed by UNDP and UNEP to support employment opportunities for ex-combatants to work in waste management and recycling.¹⁷⁵ The Recovery, Employment and Stability Programme for Ex-combatants and Communities in Timor Leste (RESPECT) focused on infrastructure rehabilitation in urban and rural communities.¹⁷⁶ The Liberia Community Infrastructure Programme attempted to encourage labour intensive and labour based activities to provide maximum opportunities for mass employment. A component of the programme, designed to provide immediate employment to ex-combatants, also involved the rehabilitation of water

wells and irrigation infrastructure.¹⁷⁷ The MINUSTAH-led Community Violence Reduction Programme has implemented over 100 projects to support debris removal efforts and infrastructure rehabilitation including the rehabilitation of 56 drainage canals and 15 water management systems in high-risk flooding areas in Port-au-Prince. These projects, which employed 44,000 at risk individuals, built over 3,000 dry-stone dams over a length of 45 kilometres of ravines and rehabilitated 26 kilometres of canals.¹⁷⁸ The Afghanistan Conservation Corps (ACC) has also focused on hiring ex-combatants and vulnerable populations to conduct reforestation activities in the pistachio woodlands and the eastern conifer forests among other projects. From 2003-2009, the ACC implemented 350 projects in 23 provinces, and generated about 400,000 labour days. The ACC has rehabilitated 108 nurseries, restored 32 public parks, planted pistachio seeds on 3,200 hectares of former woodland (see Case Study 22). These labour-intensive “green jobs” can give ex-combatants an opportunity to develop basic skills and confidence, work with community members to rebuild trust, improve the resource base and contribute to long-term reintegration goals.

In a Joint UNDP-UNEP study conducted on DDR and natural resources, an average of 50 percent of ex-combatants opted for reintegration support in the agriculture sector, and in some cases it was up to 80 percent.¹⁷⁹ While all reintegration programmes include a major focus on agriculture, few reintegration programmes actually address the sustainability of agricultural livelihoods. Apart from tools, seeds and training, critical issues such as land and water rights, dispute resolution and grievance mechanisms and access to credit, markets and transport are not explicitly addressed. Among the many implications of these gaps, an ex-combatants’ access to land may be a key determining factor affecting his or her successful reintegration into a community.¹⁸⁰ In Northern Uganda, for example, interviews with ex-combatants from the Lord’s Resistance Army revealed that 93 percent of males were unable to access land upon their return. There were 43 percent which indicated that the death of an elder in their family meant they lost access to their land; 20 percent noted their land had been sold by another relative and 17 percent reported land grabs by other community members.¹⁸¹ While a DDR programme cannot take the place of larger land reform process, DDR practitioners can be aware of the challenges for reintegration related to land access and tenure.

Employment opportunities in the agricultural sector can also stem from further development of the value chain including the processing of “premium products” that target the fair trade and/or organic markets. One example is the UNCTAD-UNDP Joint Initiative on BioTrade and Reintegration. In Aceh, Indonesia for example this initiative is assessing opportunities to further develop the nutmeg value chain in order to provide employment for male and female ex-combatants. This project completed a pilot phase in 2011 and determined strong market potential for the production of essential oils.

Case study 22: Using natural resources to provide emergency employment and livelihoods for former combatants in Afghanistan



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The Head of the Pistachio Forest Management Committee of Samangan monitoring pistachio seedling growth. Samangan province, Afghanistan, 2009

In addition to the extreme social challenges posed by the decades of conflict in Afghanistan, the condition of many natural resources has declined to unsustainable levels, making livelihoods difficult to re-establish. Though Afghanistan naturally lacks heavy forest cover for geographical reasons, over half of the woodlands in the country were lost during the Soviet occupation and in the years of subsequent conflict. Only 12 percent of land area in Afghanistan is arable, though 80 percent of the population is dependent on agriculture as their main source of livelihood.

In its Post-Conflict Environmental Assessment, UNEP estimated that the northern Afghan Pistachio Woodlands lost over 50 percent of their natural forest cover, as have other previously forested areas in the east of the country. In addition, the majority of irrigation canals and systems, which were responsible for the irrigation of about 30 percent of total arable cropland, were destroyed in the conflict.

To address both the needs of vulnerable populations and the reintegration of former members of armed groups, the Government of Afghanistan set up the Afghan Conservation Corps (ACC) project, together with the United Nations Assistance Mission to Afghanistan (UNAMA), the United States Agency for International Development (USAID) and the United Nations Office for Project Services (UNOPS). Through the ACC, ex-combatants and vulnerable populations were hired to conduct reforestation activities in the pistachio woodlands and the eastern conifer forests among other projects. As mentioned previously, from 2003-2009, the ACC implemented 350 projects in 23 provinces, and generated about 400,000 labour days. The ACC has rehabilitated 108 nurseries, restored 32 public parks, planted pistachio seeds on 3,200 hectares of former woodland in seven provinces, and planted an average of 150,000 conifer and 350,000 fruit trees each year.

Additionally, seven training centres and three seed storage facilities were built, 100 kilometres of irrigation canals were rehabilitated and 1,000 metres of retaining walls for river bank stabilization were constructed.

Community capacity for resource management was also enhanced by the establishment of Forest Management Committees by community elders in seven provinces. These committees were supported by the ACC and the Afghan Ministry of Agriculture, Irrigation and Livestock, and as of 2007 had drafted forest protection plans to protect 3,200 hectares of woodlands, and established 40 full-time community protection guards to protect the pistachio woodlands. Due to increased protection and improved management practices, villagers in the biggest pistachio woodland site called Shareek Yaar estimated that revenues for their 2006 pistachio harvest went up by 65 percent.^{182,183}

Ex-combatants with good local knowledge of the land have also worked as park rangers in Mozambique and as community forest guards or ecotourism guides in Aceh, Indonesia.¹⁸⁴ Based on these models, one of the proposals for the peacebuilding strategy in the Central African Republic was to employ thousands of ex-combatants to restore the system of protected areas and hunting grounds while also developing associated tourism facilities, infrastructure and services.¹⁸⁵ Similar proposals were also considered in South Sudan, where several thousand ex-combatants from the Sudan People's Liberation Army would be reintegrated into wildlife services for the Sudd Wetland.¹⁸⁶

In utilizing various natural resources to support emergency employment and sustainable livelihoods, a number of key lessons have also been learned with important implications for DDR programme design.

Understanding the dynamics and motivations of armed groups as they pertain to accessing and benefiting from natural resources can help to inform post-conflict security interventions, including DDR. In particular, the way that natural resources are exploited to support the objectives of the armed groups and the way that benefits are divided can provide important insights into the command structure of the group and individual incentives for membership. These dynamics need to be taken into account in order to ensure that access to natural resources does not present a risk for relapse into conflict. Also, it is important to recognize that ex-combatants are not a homogenous group – they have different economic needs and opportunities. The type of support, training and skills that ex-combatants require to benefit from natural resources during reintegration efforts will vary greatly. Specific considerations should include age, level of previous work experience and gender.¹⁸⁷

One of the key factors often overlooked when planning reintegration activities is an understanding of the war economy and its impact on formal versus informal employment opportunities. Given the state of the economy, many of the employment opportunities around natural resources are likely to be found in the informal sector. However, the informal sector is usually subject to little regulation and information is often patchy. It also often leads to unsustainable use of natural resources and to significant environmental impacts including pollution, overfishing, deforestation, and loss of wildlife. DDR programmes must understand potential incentives for ex-combatants to prefer the informal sector to the formal one. Efforts to transform and formalize economic activities wherever possible should be undertaken by DDR programmes in partnership with wider economic recovery initiatives, peacebuilding programmes and reforms in the governance of natural resources.

Finally, there has been much criticism of reintegration programs that only target ex-combatants. Community members that are excluded from these programs

question why people that have been party to violence should benefit. Such inequity can fuel resentment and undermine community-level acceptance of former combatants. As a result, the Integrated Disarmament, Demobilisation and Reintegration standards (IDDRS) advocates for a community-based approach for reintegration and second generation DDR programmes tend to focus efforts more broadly on vulnerable groups in a community while fostering reconciliation between them.^{188,189,190} In this regard the UN policy for post-conflict employment creation, income-generation and reintegration, adopted in 2009, explicitly recognizes that employment and livelihood programmes should focus on all vulnerable members of a community, including ex-combatants, displaced people, youth and women.¹⁹¹ Furthermore, there should be a balance between priority security concerns and equity considerations, especially when targeting specific individuals or groups, such as ex-combatants. Root causes of conflict, such as inequitable access to land and natural resources, also need to be addressed during reintegration.¹⁹²

Highlighting the clear linkages between natural resources and DDR, the Secretary-General's 2011 report on DDR concluded that there is a need for 'better understanding of the complex relationship between conflict and natural resources, including how it can be addressed to support the reintegration of ex-combatants and associated groups'.¹⁹³ The 2010 revised IDDRS 4.30 Module on Socioeconomic Reintegration also makes reference to the need to account for the risks and opportunities presented by natural resources when planning and implementing DDR programmes.

Civil Affairs and natural resources

Addressing land and natural resource challenges is also becoming more common within the activities of Civil Affairs, which are civilian components of UN peacekeeping operations that work at the social, administrative and sub-national political levels to facilitate the countrywide implementation of peacekeeping mandates. Civil Affairs also support the population and government in strengthening conditions and structures conducive to sustainable peace.¹⁹⁴ Overall, the three core roles of Civil Affairs in support of UN peacekeeping mandates are:

- Cross-mission representation, monitoring and facilitation at the local level
- Confidence-building, conflict management and support to reconciliation
- Support to the restoration and extension of State authority

In each of the roles that they perform, Civil Affairs officers look for opportunities to support and leverage the work of other actors (particularly local actors), to make

Case Study 23: Preventing sexual violence against women through firewood patrols, fuel efficient stoves and water infrastructure in Darfur



A woman, escorted by UNAMID, collects millet near the Zam Zam IDP Camp in El Fasher, North Darfur, 2010

In Darfur, as women and girls were regularly attacked when venturing out of IDP camps to collect firewood, the hybrid AU-UN mission in Darfur (UNAMID) began to provide armed escorts. These “firewood patrols” soon became a regular feature of the mission’s protection tasks. For example, UN police cars and UNAMID Armored Personnel Carriers escorted women from Darfur’s Kalma refugee camp twice per week into the surrounding hills and waited while groups of women chopped branches and raked grass for animal fodder.

Armed patrols have also accompanied women and girls along water supply routes, as armed groups often camp near rivers to secure their own supply. Peacekeeping patrols moved ahead of women and girls to secure water-collection points and warn of potential risks. In addition, the mission built 41 water wells since its deployment began, and 31 of them are shared with adjacent communities. In April 2011, UNAMID launched a water resources initiative that involves distributing high-capacity rolling water containers to returnees. The rolling containers, with capacity equivalent to four jerry cans, enable women and children to easily transport large amounts of water from wells to their homes, thereby lowering their exposure to harassment and violence by reducing the number of times they must leave their camp or village to collect water. Several thousand rolling containers have been dispatched to female heads of households and people living far from water points.

In 2011, UNAMID police reported more than 26,000 patrols conducted within IDP camps and with groups of mainly women and children leaving villages and camps to collect firewood, grass and water. These have assisted in limiting the prevalence of sexual violence cases, particularly during the farming and cultivation season.^{195,196}

Firewood patrols were also complemented by measures to reduce the need for firewood, such as the introduction of fuel-efficient cook-stoves. Reliance on firewood to fuel traditional cook-stoves and open fires to cook food increases pressure on local natural resources, contributes to health risks and forces women and children to spend many hours each week collecting wood while facing severe personal security risks. Instead of dispersing an already thinly-spread force through multiple firewood patrols, the Rwandan contingent of UNAMID’s predecessor, AMIS (African Union Mission in Sudan), worked with local women in Darfur to build fuel-efficient clay stoves (rondozas) traditionally used in Rwanda, reducing the need for firewood by up to 80 percent.



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UNAMID Civil Affairs, the National Forestry Corporation and the Agricultural Research Centre plant trees surrounding the mission in El Fasher to restore degraded areas

connections, and to help build on existing dynamics. They are at the forefront of the mission's work to understand the concerns and priorities of ordinary citizens, as well as support communities to engage with each other and with governance structures in the early post-conflict peacebuilding process.

As discussed in the report's introduction, the nature of peacekeeping operations has radically shifted. Instead of keeping the peace between States, the UN has increasingly been called upon to support a peace process within countries where violence is often a consequence of the failure of the State to regulate political, economic and social conflict. Civil Affairs sections of peacekeeping operations evolved in response to such situations whereby the UN system was also asked to help unify divided societies and assist States to exert legitimate authority.

As the Civil Affairs section in a peacekeeping operation is at the forefront of the mission's engagement with local communities, it often comes face to face with key resource management challenges. While UN development agencies, non-governmental organizations and other aid partners have traditionally partnered with national and local authorities to manage natural resources, there is a growing role for Civil Affairs to contribute to these goals – in particular where the illegal extraction and trade of natural resources like diamonds, timber and gold has fuelled conflict, or where natural resources will contribute to immediate peace dividends such as job creation, sustainable livelihoods, economic recovery and reconciliation. In fact, the way that Civil Affairs sections handle risks and opportunities from natural resources at the local level can have an important impact on local conflict and peacebuilding dynamics and the overall effectiveness of the mission.

In this regard, a survey of case studies from 10 current peacekeeping missions revealed that Civil Affairs activities often link to natural resources in five main ways: early warning over natural resource conflicts and associated protection needs; addressing natural resource grievances as part of conflict analysis, mitigation, resolution and reconciliation processes; using natural resources as basis for confidence building between divided groups and for establishing relationships between levels of government; restoring or extending State and local authority over natural resources; and ensuring coordination across the mission and UN country team for natural resource management interventions. Each of these functions is explored in more detail in the following sections.

First, Civil Affairs sections often monitor and identify local concerns and grievances that are relevant to the implementation of the peacekeeping mandate, including the protection of vulnerable groups. In this regard, they can act as an early warning mechanism to detect rising tensions and potential sources of instability or violence at the community level. This has included the way local elites or specific livelihood groups are securing control of natural resources as well as increasing levels of illicit natural resource extraction and trade. In the DRC

for example, the MONUSCO Civil Affairs section has partnered with the International Peace Information Service (IPIS) and Global Witness to monitor illegal mining sites and tensions with local communities. In situations where social risks are detected, Civil Affairs personnel can alert senior mission leadership to particular issues in order to facilitate a rapid response and targeted efforts towards conflict de-escalation and eventual resolution.

Civil Affairs sections in some missions have been involved in supporting local early warning capacity and coordinating protection mechanisms within the mission. For example, in Darfur, Civil Affairs determined that sexual violence against women was most likely to occur when venturing out of displaced camps to collect firewood, grass and water. As a result, the mission began to provide armed escorts to women and girls (see Case Study 23).

This early warning function could also include situations where the environmental performance of a peacekeeping operation is causing conflicts with host communities – for example, grievances caused by excessive water consumption, the misuse of cultural sites or poor waste management practices. Civil Affairs can also act as a conduit for sensitive information that may be held by private sector actors on illegal natural resource exploitation, tax and trading activities.

The second area where Civil Affairs often play a key role is addressing questions of natural resource control, ownership and access within local-level conflict analysis, mitigation, resolution and reconciliation activities. Civil Affairs officers can play an important role in identifying interventions that reduce conflict triggers and create confidence in the peace process. Conflict drivers vary extensively from one context to another and often include access to employment, land/property disputes, environmental degradation and competition over natural resources. These drivers tend to contribute to conflict when they overlap with other factors such as ethnic polarization, high levels of poverty and inequity and poor governance.

In Darfur, for example, where competition over scarce natural resources is a major cause of conflict, the UNAMID Civil Affairs section is developing a natural resource-based conflict profile of different regions to inform conflict resolution strategies. UNAMID Civil Affairs is also addressing local conflict between nomads and farmers over water shortages by improving retention ponds along seasonal migration routes. UNAMID Civil Affairs has also collaborated with the National Forestry Corporation and the Agricultural Research Centre to plant trees surrounding the mission in order to restore degraded areas and improve relations with local communities.

The MONUSCO Civil Affairs section has worked extensively to resolve prolonged conflict between the Eneyle and Munzaya communities over access to fishing areas in the Equateur Province of the DRC. Over the course of a year, Civil Affairs organized five capacity building workshops coupled with intercommunity cultural and sport activities throughout the area affected by the conflict. Regulations for equal fishing access were

Part 2: Addressing natural resource risks and opportunities

eventually established and contributed to the renewal of a pact of non-aggression between the two communities (see Case Study 24).¹⁹⁷

Similarly, during the mission in Chad, MINURCAT Civil Affairs officers were also active in the resolution of disputes between farmers and herders over scarce and contested natural resources. This included facilitating a successful reconciliation dialogue process between the Massalit (landowners and farmers) and Zaghwa (herders) where the former community had fled their villages and become IDPs. The agreement was cemented with a QIP to build a mill in one of the villages. The Civil Affairs section in UNOCI organized similar intercommunity dialogues between farmers and herders in northern Côte d'Ivoire in response to recurring conflicts that had caused deaths and significant damage.

Civil Affairs in Liberia facilitated consultative forums with local officials, civil society and community representatives on reconciliation, peacebuilding and conflict resolution issues in 15 counties. During the consultations, complex issues surrounding identity and citizenship, land and natural resources, religion and governance were raised and discussed. This yielded important information on topics such as ethnic identity and land disputes and helped UNMIL gauge the pulse of local communities. During the forums, the need to develop sustainable peace structures was identified, and a key output was the establishment of County Peace Committees.

It is also important to note that lessons from practitioners indicate that poorly conceived or badly managed dialogue or reconciliation can deepen divisions and reinforce prejudice. Civil Affairs, whether in a supportive or direct facilitation role, should identify key or potentially difficult issues in advance of convening a dialogue. It is important not to be overly ambitious, to be realistic about the skills and capacity within the team and to ensure that those involved in facilitating have the appropriate skills and experience to diffuse tension.

Third, Civil Affairs can also use shared natural resources or common environmental threats as a component of local confidence building efforts as they provide an effective arena for dialogue and cooperation between divided communities, and between local and national levels of government. Cooperation over natural resources almost always requires the engagement of multiple actors in ways that transcend traditional lines of power and authority. As a result, natural resources can serve as a platform for 'inclusivity' since they provide a bridge across vertical and horizontal levels of social organization and political power. Effective management of natural resources can contribute to rebuilding connections and trust between communities, as well as between communities and governance institutions.¹⁹⁸ Few other issues have such versatility. In this regard, projects involving the shared management of natural resources can help to create an inclusive political space, promote public participation and build credibility in the political process at the local level.

While QIPs are a small element of a mission's overall work, they can be an important part of a mission's confidence building efforts and often involve a natural resource component. These projects are used by UN peacekeeping operations to establish and build confidence in the mission, its mandate, and the peace process, thereby improving the conditions for effective mandate implementation. For example, in Lebanon, the UNIFIL Civil Affairs section initiated a reforestation project that aimed to plant over 10,000 trees to increase fruit production and aid the local beekeeping industry (see Case Study 25). This initiative set out to create shared green space for recreational benefits in the communities, increase biodiversity of nearby farm land and foster economic development in the region by increasing its attractiveness to tourists.^{199,200,201} The project was also carried out under the leadership and ownership of the government to increase cooperation with local structures.

UNMIL has used QIPs to further support the Mission's natural resource management mandate to support the extension of State control in natural resource rich areas (see Case Study 15). Examples of these QIPs include the construction of offices for Ministry of Lands, Mines, and Energy or the creation of support infrastructure such as police stations, immigration posts, schools, clinics and water pumps in resource rich areas. While some of these QIPs were intended to directly support State security capacity, others were used to generate buy-in and support from communities in areas dominated by illegal exploitation of natural resources (rubber plantations occupied by ex-combatants) for the extension of State authority.

Similarly, QIPs implemented by UNAMID in Darfur support small agriculture projects (i.e. communal plantations, farmers' cooperatives, fruit and vegetable processing), livestock or poultry raising and improved waste and water management. QIPs can also be used to provide emergency employment for vulnerable populations, including ex-combatants and conflict-affected community members, as well as establishing basic infrastructure and services needed for recovery. While some QIPs directly utilize natural resources, there is no current environmental screening of QIPs projects. However, the forthcoming review of the 2007 Policy Directive on QIPs and the 2009 Guidelines provide an opportunity to address this dimension.

Fourth, Civil Affairs work in support of the restoration of State authority involves strengthening the ability of State institutions to function, as well as improving the interaction between State institutions and civil society.²⁰² In many cases, Civil Affairs components are not only involved in the "restoration" of State authority (helping to bring back something that existed in the past) but also in the "extension" of the State authority (supporting its presence in areas where it has never been present or for where it has been absent for an extended period of time). As mentioned previously, these activities either directly involve the management of natural resources as mandated by the Security Council, or indirectly involve

Case study 24: Addressing natural resource grievances within conflict resolution and reconciliation activities in the DRC



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Fishing rights are at the centre of conflict between Enyele and Munzaya in Equator province, DRC

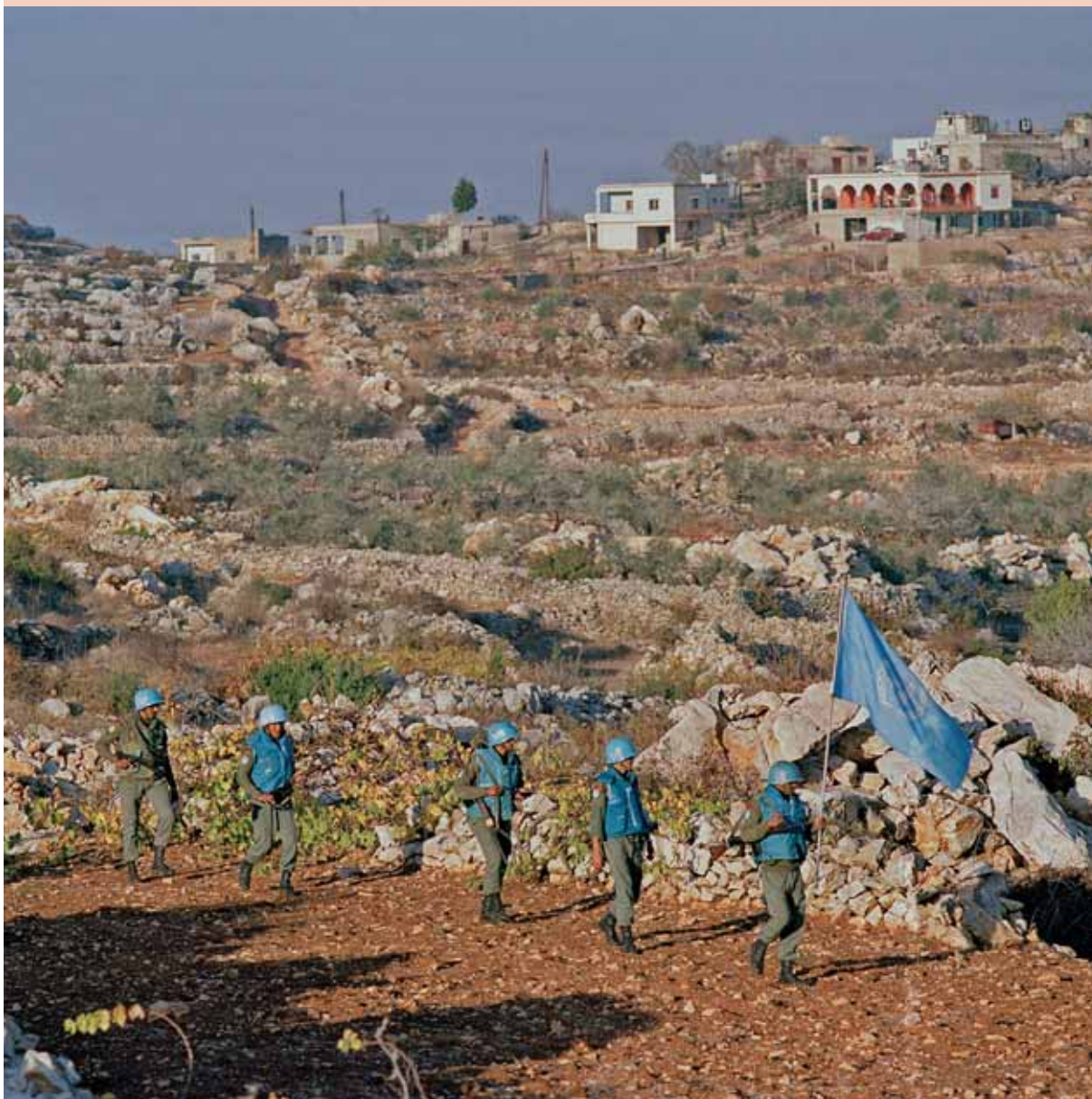
Two years of prolonged conflict between the Enyele and Munzaya communities in Equator province of the DRC centred on access to natural resources and fishing rights. The conflict resulted in over 100 deaths, displaced over 160,000 people and led to the destruction of hundreds of houses, shops and personal belongings.

In response to this local level conflict, Civil Affairs undertook a series of dialogue and conflict resolution activities in collaboration with the international NGO, Search for Common Ground (SFCG) and UN partners. For example, over the course of a year (June 2010 – May 2011), Civil Affairs organized five capacity building workshops coupled with inter-community cultural and sport activities throughout the area affected by the conflict.

To provide a road map for further activities to support peace consolidation, a Common Action Plan (CAP), was developed following a series of conflict mediation workshops. The CAP outlines the creation of regulations for equal access to fishing ponds by the Enyele and Munzaya communities and direct negotiations between Lobala and Boba tribes, who were at the centre of the conflict.

The local peace building process supported by Civil Affairs, the provincial government and SFCG, resulted in the renewal of a pact of non-aggression between the two communities and a large festival of reconciliation.

Case study 25: Confidence building through community reforestation efforts in Lebanon



In Lebanon, the UNIFIL Civil Affairs section helped support a quick impact reforestation project that aims to plant over 10,000 trees

In Lebanon, the UNIFIL Civil Affairs section helped support a quick impact reforestation project that aims to plant over 10,000 trees, including walnut, olive, carob, berry, laurel, pine and acacia, to increase fruit production and aid the local beekeeping industry as an early confidence building measure. Other benefits included creating shared green space for recreational benefits in the communities, increasing biodiversity of nearby farm land, and fostering economic development in the region by increasing its attractiveness to tourists. The projects were also carried out under the leadership and ownership of the government to increase cooperation with local structures. The project has been received positively with great support from the community and the people directly involved.

The role of Civil Affairs was to develop, together with the municipality, the project proposal (with all the necessary documentation i.e. justification, beneficiaries, implementation methodology, budget, etc), present the idea to donors and mobilize financial resources, follow-up on the expressions of interest, establish MOUs between implementing partners, chair the implementation committee and provide overall project coordination support, and assist the municipality in providing final narrative and financial reports to the donor. The same municipality is now in the process of developing a second proposal, with UNIFIL playing a lesser role.

natural resource management as a basic component of good governance.

For example, the Civil Affairs section in the peacekeeping mission in Liberia worked towards restoring the administration of natural resources as mandated by Security Council Resolution 1509. This involved providing both technical and logistical support to the Forestry Development Authority, the Environmental Protection Agency and the Ministry of Lands, Mines and Energy.²⁰³ UNMIL Civil Affairs provided national capacity building support towards compliance with the Kimberley Process Certification Scheme, the Forest Law Enforcement, Governance and Trade agreement, and the Extractive Industries Transparency Initiative (see Case Study 15).

In Timor-Leste, the peacekeeping mission was faced with a situation whereby 93 percent of economic activity was derived from a narrow economic base of government-controlled oil resources. However, Timor-Leste lacked an audit system for natural resource related revenues and remained vulnerable to the misuse of public funds. Amidst growing reports of corruption and misuse of public funds and assets, UNMIT adopted a two-pronged approach to tackling corruption. First, UNMIT recruited an anti-corruption specialist to work with State agencies and leaders to put into place a more functional anti-

corruption institutional framework. Second, UNMIT promoted dialogue about the challenges and implications of corruption among national leaders in order to cultivate an understanding of the need for an effective anti-corruption framework and functioning audit agency.

It is important to bear in mind that the work undertaken by Civil Affairs forms part of broader UN and international community efforts to support the restoration and extension of State authority. Civil Affairs does not operate in a vacuum and needs to work alongside other mission components involved in institutional support – such as rule of law, police and military as well as UN partners, the World Bank, bilateral donors and INGOs, all of which are engaged in promoting good governance and supporting State institutions.

Finally, in cases where Civil Affairs has a direct mandate on natural resource management, it is essential to establish a coordination framework for the array of different UN, local and international actors operating on the ground to address natural resource challenges, each with its own approach, timeframe, funding mechanisms and mandates. Strategic coordination is required to avoid duplication of effort, to exchange information with other actors (e.g., who, what, where), and to achieve a common goal through combining the efforts and contributions made by different actors. Coordination

Box 10: Tools, guidance and best practice on post-conflict peacebuilding and natural resources

The linkages between natural resources and violent conflict are a critical challenge faced by many countries and peacekeeping operations. The exploitation of high-value natural resources, including oil, gas, minerals and timber, for example, has often been cited as a key factor in triggering, escalating or sustaining conflicts around the globe. Furthermore, increasing competition for diminishing renewable resources, such as land and water, is on the rise, compounded by environmental degradation, population growth and climate change. If they are well managed, however, natural resources can also serve to prevent conflicts or shore up efforts toward peace and sustainable development in war-torn nations.

To collect good practices in managing natural resources in post-conflict settings, UNEP partnered with the UN Peacebuilding Support Office (PBSO), the Environmental Law Institute, the Peace Research Institute Oslo (PRIO), and the Universities of McGill, Tokyo, Duke, Tufts and Victoria on a major global research programme focused on post-conflict peacebuilding and natural resources.

The research programme yielded more than 150 peer-reviewed case studies and analyses by 230 scholars, practitioners and decision makers covering 50 post-conflict countries. This material is being assembled into a set of six edited books to be published by Earthscan addressing: (1) high-value natural resources; (2) land; (3) water; (4) resources for livelihoods; (5) assessment and restoration of natural resources; and (6) resource governance. In addition, a single synthesis book will be published by Cambridge University Press. All of the case studies will be freely available by the end of 2012.

The lessons learned from the research programme will contribute to future UN training and policy development.²⁰⁴ In particular, they will be used by UNEP, IISD and UNITAR in the pre-deployment training modules on natural resources for peacekeepers as well as by the UN-EU Partnership on Natural Resources and Conflict Prevention. The latter partnership, consisting of the EU and six UN partners (UNEP, UNDP, DPA, PBSO, HABITAT and DESA) has developed a series of guidance notes and training programmes for UN country teams and EU delegations on preventing conflicts over natural resources.²⁰⁵ The UN-EU partnership, managed by the UN Interagency Framework for the Coordination of Preventive Action, is designed to enhance policy development and programme coordination between key actors at the field level in four main areas:

- Extractive industries and conflict
- Renewable resources and conflict
- Land and conflict
- Capacity development for managing land and natural resources.

Part 2: Addressing natural resource risks and opportunities

also includes handing over all information collected on natural resources, conflict and peacebuilding dynamics to the subsequent peacebuilding mission (where relevant) or the UN country team during mission drawdown and closure. In this regard, one of the findings of the 2011 *Independent Review of Civilian Capacity in the Aftermath of Conflict*, led by former Under Secretary-General for DPKO Mr Jean-Marie Guéhenno, involved the need for additional international support capacity and coordination on natural resource management.²⁰⁶

For example, the Civil Affairs division in UNMISS recognized that conflicts in South Sudan have many underlying causes, some of which (e.g., competition for

resources, such as land, water, grazing areas, charcoal production, etc.) may be possible to mitigate through well targeted and coordinated assistance. UNMISS Civil Affairs helped the Government of South Sudan and local authorities to identify the most compelling conflict situations and underlying causes that donor funding could help mitigate by working with local residents and leaders and consolidating this information and analysis into viable State level plans, including the monitoring of implementation of these plans. Prior to the establishment of UNMISS, UNMIS worked closely with UN Country Team agencies in targeting Sudan Recovery Fund allocations on resource-based conflicts in Jonglei and three other States of Southern Sudan.

Conclusions and policy recommendations

Conclusions and policy recommendations

Conclusions

This report has provided a comprehensive overview of how peacekeeping operations affect, and are affected by natural resources and environmental conditions. It has highlighted the risks, opportunities and benefits for UN peacekeepers from improving the environmental performance of UN missions and capitalizing on the peacebuilding potential of natural resources by the military, police and civilian components of a mission.

Twelve main findings are drawn from the case studies and examples reviewed in the report:

- **Resource-efficient practices, technologies and behaviours offer multiple benefits to peacekeeping missions:** Proven and cost-effective practices, technologies and behaviours can reduce energy and water use as well as waste production, thereby generating significant financial savings, while at the same time reducing the environmental impacts of UN peacekeeping missions. Improved health, safety and security of local communities and personnel, self-sufficiency of camps and reduced potential for disputes with local communities are further benefits.
- **Examples of good practice have emerged across all of the main sectors of the peacekeeping infrastructure:** A number of current peacekeeping missions have independently adopted environmental policies and undertaken impressive and far-reaching measures to introduce resource-efficient technologies and minimize the environmental impacts of their operations. Significant testing and field application has been conducted in the domains of water, waste, energy, transport and building materials. While adoption in the field has been limited and ad hoc to date, the 2009 Environmental Policy provides an excellent foundation for progress. Recent challenges in addressing the management of wastewater in some missions, including Haiti and the DRC, further highlight the need for system-wide implementation of the policy.
- **An adequate universal system for compliance monitoring of the Environmental Policy is not yet in place:** Despite the progress that has been made in implementing the Environmental Policy, the tools in place are insufficient for monitoring compliance or sharing lessons on environmentally sound practices and on the use of resource-efficient technologies in a peacekeeping context. Less than half of the peacekeeping missions have a dedicated environmental officer, despite the policy requirement. There is a lack of awareness of the types of resource-efficient technology that are already available through standard UN procurement channels, as well as a lack of environmental training available for mission staff. Accelerating the implementation of the policy will depend on the adoption of a full-fledged compliance monitoring system combined with staff incentives and training.
- **Uncertainty in the duration of the mission is one of the main barriers to adopting more resource-efficient technologies:** While the average actual length of a UN peacekeeping mission is seven years, cost-benefit calculations for resource-efficient technologies are often based on the duration of the original mission mandate, typically six to 12 months. Few resource-efficient technologies will pay back over this short period, and more realistic planning assumptions should be adopted. Technologies such as solar panels, central chillers or energy-efficient generators offer excellent life-cycle values and return on initial capital investment within only two to three years. Consideration of the advantages offered by such infrastructure could be incorporated within the ongoing modularization effort undertaken by DFS. The ability to hand over selected infrastructure to local communities at mission's end is an additional benefit that should be considered.
- **Peacekeeping operations in situations where natural resources have financed or fuelled conflict represent 50 percent of the total peacekeeping budget ever spent:** Since 1948, 17 UN peacekeeping missions with a combined budget of USD 42 billion have addressed conflicts that were at least partially sustained by revenues from natural resources or by grievances over their ownership, access and control. This represents half of the total peacekeeping budget ever spent, yet only 25 percent of the total number of operations in the same period. These figures highlight the significant costs associated with failed resource governance, and indicate the need for greater preventive action and more focus on resource governance as part of State building and preventing conflict relapse.

- **There is an increasing trend towards including natural resource provisions in peace agreements:** All major peace agreements signed between 2005 and 2011 have included detailed provisions on natural resources, as compared with only 50 percent of the agreements concluded between 1989 and 2004. Land is by far the most commonly addressed resource, although extractive resources (oil, gas and minerals) and renewable resources (water, fisheries, forests and wildlife) are also included. This trend demonstrates the need for the international community – and peacekeeping operations in particular – to build new capacities, partnerships and flexible financing arrangements to support, where requested, the implementation of these provisions.
- **There has been little progress in systematically considering and documenting how natural resources can support, advance or undermine the aims of a peacekeeping mission:** DPKO does not have systems in place to evaluate and document how natural resources and environmental conditions have impacted the implementation of a specific mission’s mandate. These linkages have not received sufficient attention due in large part to the many priorities mandated by the UN Security Council to a peacekeeping mission, as well as the overriding focus on mission security and operational effectiveness. However, there are good reasons to increase this capacity as missions may be impacted by these risks on a more frequent basis. In particular, as the global population continues to rise, and the demand for resources continues to rise and there is significant potential for increased global competition and conflict over the world’s limited supply of natural resources. Fragile States, including post-conflict countries, could face a significant resource scramble in the coming decades. The predicted consequences of climate change for water availability, food security, disease prevalence, sea level rise and population distribution could also compound existing vulnerabilities and insecurity, thereby increasing the risk of conflict onset. Some of these risks were recognized by the Security Council in its recent debate and presidential statement on 20th July 2011. UN peacekeeping operations must have the capacity to work with host governments, development partners, companies and environmental organizations to competently address environment and natural resource issues that have a clear connection to peace and security when requested to do so and supported by headquarters.
- **While the Security Council has incrementally improved the scope and specificity of the mandates given to peacekeeping missions in addressing natural resources, successful implementation continues to be hampered by a combination of factors:** These include: the human and financial resources made available to peacekeeping missions by Member States; the political will of the host country to tackle illegal exploitation and transparency challenges; and the cooperation of regional and global trading partners to comply with sanctions or ensure that companies meet due diligence standards where applicable. In some cases, non-elected transitional administrations or power-sharing authorities combined with private sector actors have undermined peacekeeping efforts to restore authority in order to continue profiting from resource revenues. Successfully restoring the administration of natural resources requires political, technical and financial support in four key pillars simultaneously: extending State authority into illegally occupied sites and controlling border areas; bringing transparency to resource concessions and associated revenues; participating in international certification schemes; and involving civil society in key resource management policies and decisions.
- **The UN Security Council has given uneven guidance on the appropriate level of cooperation between peacekeeping missions and Expert Panels mandated to monitor sanctions:** Not all UN peacekeeping operations have specific mandates to work with Expert Panels, nor do all Expert Panels have mandates to work with peacekeeping missions. Furthermore, peacekeeping operations can only consider and implement Expert Panel recommendations when they are accepted by the Security Council and formally mandated to do so. Yet, given the mutually supporting and compatible interests of each entity, closer cooperation between Expert Panels and peacekeeping operations, drawing on the comparative advantage of each, could benefit the work of both. The UN Security Council needs to better understand the potential for improved collaboration, as well as the normative, political and operational challenges of encouraging such joint support. Clear criteria are needed which clarify when and how mutual support should be authorised.
- **A number of tools have emerged to help safeguard natural resources and restore good governance in post-conflict countries:** Peacekeeping missions are increasingly confronted with situations in which host-governments are unable to manage high-value natural resources in a transparent manner, which would prevent conflicts and enable both sustainable and equitable economic growth. Post-conflict governments that face widespread, illegal and predatory natural resource exploitation challenges have requested assistance from the UN Security Council and other international partners to safeguard their natural resources, restore good governance, and negotiate concessions that preclude corruption, build public confidence and ensure the best deal for its citizens in the long-term. A number of tools have emerged to contribute to these goals. These include temporary co-management mechanisms (the Governance and Economic Management Assistance Programme in Liberia), independent monitoring of resource management reforms (the Expert Panel in Liberia), due diligence requirements on sourcing minerals from conflict zones (the DRC) and principles

such as the Natural Resource Charter initiative or the UN Guiding Principles on Business and Human Rights. These tools may set important precedents that require further study and documentation by DPKO and the UN Security Council in order to consider their applicability to other post-conflict situations. Host countries have also requested that peacekeeping missions help them join or comply with certification schemes or voluntary partnerships such as the Kimberley Process, the FLEGT scheme and the EITI. It is essential that peacekeeping missions, development partners and environmental organizations agree on a joint strategy and approach towards providing coordinated support to these initiatives. Greater consultation and collaboration with private sector actors and extractive industries will also be required.

- **Successful reintegration of former combatants often depends on natural resources:** Poorly governed natural resources in a post-conflict setting can be a major impediment to DDR efforts as illicit exploitation can offer financial benefits that vastly outstrip those offered by formal DDR programmes, with harmful environmental consequences that may jeopardize sustainable recovery and community livelihoods. On the other hand, natural resources can provide opportunities for emergency employment and the establishment of sustainable livelihoods for former combatants. Access to land may be a key determining factor affecting the successful reintegration of a former combatant into a community.
- **Natural resources can support various aspects of peacebuilding and offer a unique platform and entry point for the Civil Affairs section of a peacekeeping mission to engage local communities:** Access to land, freshwater, fisheries and forests can be pillars of recovery and a basis for employment, economic growth and sustainable livelihoods. QIPs aiming to demonstrate the visible dividends of peace often directly or indirectly rely on natural resources, while restoring sustainable livelihoods at the community level and overcoming divisions through reconciliation processes often involves questions of natural resource ownership, access and control. As such, natural resources can provide an arena for dialogue and confidence building between divided communities, as well as a platform for cooperation between communities and emerging levels of local and national government. However, if decisions around natural resource allocation, ownership and access are not well managed, they also create new sources of tension and conflict. Civil Affairs sections of peacekeeping operations do not yet take a strategic and integrated approach to addressing natural resource risks and opportunities.

Ultimately, the way that peacekeeping operations handle risks and opportunities from natural resources can have an important impact on the overall effectiveness of the mission and influence the trajectory of longer term stability, development and sustainable resource use. It is

therefore critical that where natural resources have been a factor in the conflict, where they have a major role in the national economy or where they support the majority of rural livelihoods, a key focus of peacebuilding and post-conflict reconstruction should be on strengthening natural resource governance. This should involve strategic assessments of the country's resource base; the development of a legal framework guaranteeing the transparent, equitable and sustainable management of natural resources; and institutional capacity building to enforce this framework effectively.

Policy recommendations

In this regard, the following eight recommendations address the risks and opportunities from the environment and natural resource issues in UN peacekeeping missions:

1. Effective implementation of DPKO/DFS environmental policy should be ensured

Compliance with the 2009 Environmental Policy is mandatory for all personnel working in UN peacekeeping operations. To date, however, the policy has not led to sufficient concrete change on the ground. The development of training and infrastructure modules within the Global Field Support Strategy that incorporate resource-efficient designs and technologies is one important effort under way to support implementation. Further application of the policy should take into account the size and geographic location of the camp, local climatic and disaster risks, security conditions, anticipated energy, water and waste demands, and the capacities of respective mission personnel throughout all stages of the mission's life-cycle. As part of the full roll-out process, it will be necessary to establish compliance monitoring mechanisms in order to track improvements in environmental performance, determine total cost implications and promote accountability. At the centre of any such mechanism should be reporting on an annual basis against a set of key environmental performance indicators, representing each of the themes within the 2009 Environmental Policy. Furthermore, it should be ensured that Environmental Baseline Studies and Environmental Impact Assessments are conducted for each mission as a standard due diligence procedure. These initial surveys will facilitate preparation of an Environmental Action Plan as well as an Emergency Preparedness Plan, which are both vital components of an Environmental Management System (EMS). Appropriate staffing and training resources are paramount, both in missions and at headquarters. A dedicated environmental officer should be established at each mission and should report directly to a senior staff member in a strategic position, such as the Director of Mission Support. DFS/DPKO and UNEP should build on their existing collaboration to intensify the implementation of the 2009 Environmental Policy starting with undertaking of Environmental Baseline Studies for all current missions and identifying immediate opportunities for improving environmental performance.

2. The Security Council should be systematically informed of the linkages between natural resources and conflict in countries where it is considering authorizing a peacekeeping mission

The linkages among natural resources and conflict are complex and often misunderstood or neglected by the international community. When the Security Council is considering the deployment of a new mission, it should be briefed on how natural resources have contributed to, financed or sustained specific conflicts or insecurity in the given country and region. Resource-related conflict drivers should be duly reflected in mandates as deemed appropriate by the Security Council and as requested by host nations. Where sanctions regimes are in place or being considered, briefings may include ways for the peacekeeping mission to support or cooperate with Expert Panels, as well as ways to help build the capacity of national authorities to monitor and enforce sanctions. In countries where natural resources have financed or fuelled conflict, the Special Representative of the Secretary-General may need to appoint a special advisor on natural resources to help the peacekeeping mission coordinate efforts with the UN country team, donors, national stakeholders and regional actors as well as to assist in progress reporting to the Security Council.

3. Where natural resources fuelled or financed conflict, peacekeeping missions should be given a more systematic mandate to support national authorities in restoring the administration of natural resources, enforcing national laws, monitoring sanctions and prosecuting violations

Post-conflict governments often lack the capacity to reassert control over natural resources once their trade has become militarized and used to finance arms, armed groups and other illicit activities. Under these conditions, peacekeeping operations can play an essential role in helping national authorities restore and extend sovereign control over resource extraction sites, rebuild capacity for resource governance, and enforce both national laws and commodity sanctions. When post-conflict governments face the difficult process of allocating and overseeing natural resource concession agreements, peacekeeping missions can help by providing advice on best practice. In the delivery of these activities, peacekeeping staff will require additional training to monitor laws and sanctions, assist national authorities in the negotiation of concession contracts and in the transparent management of revenues, conduct joint patrols and systematically recognize, record and share information with police and customs officials on illicit products. They should also be prepared to record and hand over any information that may be useful in the event that specific conflict actors are indicted by the International Criminal Court for violations of the Rome Statute, including acts of pillage of natural resources that contributes to war crimes, crimes against humanity and genocide.

4. DPKO and DFS, together with UN Country Team partners, should incorporate the environment

and natural resource dimensions of conflict and peacebuilding into the Integrated Mission Planning Process and the Integrated Strategic Framework

The Integrated Mission Planning Process, which was designed to align the capacities of the UN system under a single strategic vision for peacekeeping and peacebuilding, provides little guidance on addressing natural resources. As the UN system moves forward in implementing and refining the process, it should explicitly consider how the risks and opportunities from natural resources and the environment can be addressed in a strategic and coherent way by the combined efforts of the peacekeeping operation, the existing UN country team and non-resident agencies. The resulting Integrated Strategic Framework should clearly articulate a division of responsibility and coordination framework for addressing the political, security and economic dimensions of natural resources, including linkages to DDR programmes, and sanctions. It is also essential for any peacekeeping mission to ensure a smooth handover of information on interlinked natural resource, conflict and peacebuilding dynamics to any subsequent peacebuilding mission led by the Department of Political Affairs and supported by the UN Peacebuilding Commission. Given that poor governance of natural resources can contribute to instability and conflict relapse at any point of the peacebuilding process, strengthening national capacity for transparent, equitable and sustainable management should be a key component of State building.

5. The Civil Affairs components of peacekeeping operations should understand and capitalize on the peacebuilding potential of natural resources and the environment

Civil Affairs sections at peacekeeping missions should more systematically consider how natural resources can be used as a means to deliver on wider conflict prevention and peacebuilding goals as part of their community engagement strategy. This should include: monitoring rising tensions over natural resources and addressing protection needs for vulnerable people; addressing natural resource grievances as part of conflict analysis, mitigation, resolution and reconciliation processes; using natural resources as basis for confidence building between divided groups and for establishing relationships between levels of government; restoring or extending State and local authority over natural resources as mandated by the Security Council or as a component of good governance; and ensuring coordination across the mission and UN country team for natural resource management interventions. In this regard, implementation of the recommendations contained in the independent review on Civilian Capacity in the Aftermath of Conflict on the need to establish dedicated international support and coordination capacity on natural resource management is critically needed.

6. Demobilization, disarmament and reintegration programmes delivered by peacekeeping missions and

development partners should systematically consider emergency employment and sustainable livelihoods based on natural resources and the environment

Peacekeeping missions involved in DDR programmes should work in partnership with PBSO, UNDP, UNEP, ILO, FAO, HABITAT and other agencies to create emergency employment and sustainable livelihoods from natural resources, while also considering issues of land and natural resource access, ownership, control and sustainable use. In general, there are four main sectors where both the reinsertion and reintegration phases of DDR can directly or indirectly involve natural resources: repair of infrastructure (energy, water and waste), environmental rehabilitation, agriculture and bio-trade and the management of protected areas. DDR programmes will need to determine how informal activities involving natural resources can be transformed into formal ones, as well as how a gender-sensitive approach can be adopted. In parallel with these efforts, natural resource sectors where armed groups were involved or continue to exploit illegally may require targeted security interventions by peacekeeping forces combined with strong oversight and management reform.

7. Training on environment and natural resource management in a post-conflict context should be made a standard component of pre-deployment and in-mission orientation

Environment and natural resource management issues with direct links to conflict and peacebuilding must be better understood and acted upon by a broad range of personnel – not only those with responsibility for environmental issues. The UN should ensure that pre-deployment and in-mission training is made available to all military, police and civilian personnel and that in-depth training is provided to staff with specific responsibilities related to environmental issues or in areas that could impact the governance or use of natural resources. Training programmes should target a minimum of five categories of personnel: (i) leadership, senior political advisors and integrated mission planners on the broad linkages among natural resources, conflict and peace combined with intervention strategies; (ii) environmental and natural resource officers on improving environmental performance and linking natural resource management to the effective implementation of a peacekeeping mandate; (iii) Civil Affairs staff involved in conflict resolution, confidence building and reconciliation activities or QIPs with a

clear natural resource or environmental dimension; (iv) civilian, police and military staff involved in the design and implementation of DDR programmes or provision of support to UN Expert Panels; and (v) other personnel (troops, civilians, police forces) requiring a broad understanding of the linkages among natural resources, conflict and peace as well as awareness on basic environmental practices and norms (e.g. engineers). This training should build on existing guidance materials and training modules developed by the UN-EU Partnership on Natural Resources and Conflict Prevention, as well as specific training on natural resources and peacekeeping developed by UNEP, IISD and UNITAR.

8. An Expert Panel on natural resources and fragile States should be established by the appropriate UN mechanism with a mandate to review and document good practice in various aspects of natural resource management

Fragile States, including post-conflict countries, represent specific governance challenges for natural resources which require policies and safeguards that are distinct from other developing countries. These countries often contain major reserves of high-value natural resources and biodiversity which are subject to a lack of transparent management and concentrated control together with illegal and unsustainable exploitation. In this regard, an Expert Panel should be established by the appropriate UN mechanism with a mandate to review and document good practice and lessons learned in restoring resource governance, issuing concessions, establishing appropriate safeguards to prevent abuse and plunder, and holding parties accountable for illegal resource exploitation and/or the violation of sanctions. It should also explicitly consider how peacekeeping missions can work more effectively to restore the administration of natural resources in post-conflict countries as well as increase collaboration with Expert Panels and the relevant extractive industries in the monitoring and enforcement of sanctions. The Expert Panel should also consider the merits of establishing a standard definition of the term “conflict resources” with corresponding actions and instruments to restrict their trade. The Expert Panel should also review how financial tools that were designed to address conflict prevention and early peacebuilding needs, such as the UN Peacebuilding Fund and the EU Instrument for Stability, could provide more rapid and flexible financing to programmes that address the illegal exploitation of natural resources in post-conflict countries and fragile States.

Annexes

Annex 1

Security Council responses to conflicts linked to natural resources (1948-2011)

ANGOLA – United Nations Angola Verification Mission I, II, III (UNAVEM) / United Nations Observer Mission in Angola (MONUA)

Budget (billions): \$1.3

Years active: 1989-1997; 1997-1999

Security Council Resolution 864 (1993)

Natural Resource Targeted:Petroleum.

Sanctions: Embargo against selling petroleum to UNITA (The National Union for the Total Independence of Angola).

Security Council Resolution 1173 (1998)

Natural Resource Targeted:Diamonds.

Sanctions: Embargo against importing diamonds from Angola that are not accompanied by a Certificate of Origin issued by the Angolan government.

Security Council Resolution 1237 (1999)

Natural Resource Targeted:Diamonds, Petroleum.

Expert Panel: Establishes an Experts Panel to investigate violations of sanctions on diamonds and petroleum.

Security Council Resolution 1448 (2002)

Natural Resource Targeted:Diamonds, Petroleum.

Sanctions: Lifts all sanctions.

CAMBODIA – United Nations Advance Mission in Cambodia (UNAMIC) / United Nations Transitional Authority in Cambodia (UNTAC)

Budget (billions): \$1.6

Years active: 1991-1992; 1992-1993

Security Council Resolution 792 (1992)

Natural Resource Targeted:Logs, Minerals, Gems.

Peacekeeping Mandate:.....Take appropriate measures to secure the implementation of a moratorium on the export of logs.

Sanctions:.....Supports decision of Supreme National Council (SNC) to set a moratorium on export of logs; requests States to respect moratorium; and urges new moratorium on minerals and gems.

Security Council Resolution 810 (1993)

Natural Resource Targeted:Timber, Minerals, Gems.

Peacekeeping Mandate: Welcomes decision by the SNC to adopt a moratorium on the export of minerals and gems, and to consider limits on the export of sawn timber from Cambodia in order to protect Cambodia's natural resources.

CÔTE D'IVOIRE – United Nations Operation in Côte d'Ivoire (UNOCI)**Budget (billions):** \$3.9**Years active:** 2004-ongoing**Security Council Resolution 1643 (2005)****Natural Resource Targeted:**Diamonds.**Sanctions:**.....Sanction against import of rough diamonds from Côte d'Ivoire.**Expert Panel:**.....Establishes a Group of Experts to monitor production and illicit export of diamonds and on sources of conflict financing including from natural resources.**Security Council Resolution 1727 (2006)****Natural Resource Targeted:**Diamonds.**Expert Panel:**.....Extends the mandate of the Group of Experts to continue monitoring sanctions violations as well as to exchange information with UNOCI and the French forces in the context of their monitoring mandate.**Security Council Resolution 1739 (2007)****Peacekeeping Mandate:**Re-establish by the Government of Côte d'Ivoire the authority of the State and of the institutions and public services essential for social and economic recovery.**Security Council Resolution 1980 (2011)****Natural Resource Targeted:**Diamonds.**Sanctions:**.....Renews sanctions against the import of rough diamonds from Côte d'Ivoire.**Expert Panel:**.....Extends the mandate of the Group of Experts to continue monitoring sanctions violations.**DEMOCRATIC REPUBLIC OF THE CONGO – United Nations Organization Mission in the Democratic Republic of the Congo (MONUC) / United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO)****Budget (billions USD):** \$11.6**Years active:** 1999-2010; 2010-ongoing**Security Council Presidential Statement 20 (2000)****Natural Resource Targeted:**Natural resources.**Peacekeeping Mandate:**Provide logistical support to the Panel of Experts.**Expert Panel:**.....Panel of Experts mandated to research and analyse the links between the exploitation of the natural resources and the continuation of the conflict.**Security Council Resolution 1533 (2004)****Natural Resource Targeted:**Natural resources financing arms.**Peacekeeping Mandate:**Mandated to inspect, without notice the cargo of aircraft and of any transport vehicle using the ports, airports, airfields, military bases and border crossings in North and South Kivu and in Ituri.**Expert Panel:**.....Group of Experts established.**Security Council Resolution 1807 (2008)****Natural Resource Targeted:**.....Natural resources.**Expert Panel:**Extends mandate of Group of Experts to report on sources of financing, such as from natural resources, which are funding the illicit trade of arms.**Security Council Resolution 1856 (2008)****Natural Resource Targeted:**Natural resources.**Peacekeeping Mandate:**Mandated to work in cooperation with the Government of the DRC to use its monitoring and inspection capacities to curtail the provision of support to illegal armed groups derived from illicit trade in natural resources.**Security Council Resolution 1857 (2008)****Natural Resource Targeted:**Natural resources.**Sanctions:**.....Establishes travel restrictions and assets freeze for individuals or entities supporting

the illegal armed groups in the eastern part of the Democratic Republic of the Congo through illicit trade of natural resources. Encourages Member States to ensure that importers, processing industries and consumers of Congolese mineral products under their jurisdiction exercise due diligence on their suppliers.

Expert Panel:..... Extends mandate of Group of Experts and requests to include in its reports any information on entities supporting the illegal armed groups in the eastern part of the Democratic Republic of the Congo through illicit trade of natural resources.

Security Council Resolution 1896 (2009)

Natural Resource Targeted: Minerals.

Expert Panel:..... Extends mandate of Group of Experts to produce recommendation for the exercise of due diligence guidelines for mineral products.

Security Council Resolution 1906 (2009)

Natural Resource Targeted: Minerals.

Peacekeeping Mandate: Mandates MONUC to consolidate and assess, jointly with the Government of DRC, its pilot project of bringing together all State services in five trading counters in North and South Kivu in order to improve the traceability of mineral products.

Security Council Resolution 1925 (2010)

Natural Resource Targeted: Minerals.

Peacekeeping Mandate: Support the Government's efforts and enhance its capabilities, to prevent the provision of support to armed groups, in particular support derived from illicit economic activities and illicit trade in natural resources. [...] Consolidate and assess, jointly with the Government of the Democratic Republic of the Congo, the pilot project of bringing together all State services in five trading counters in North and South Kivu in order to improve the traceability of mineral products.

Expert Panel:..... Extends mandate of Group of Experts and adds a sixth expert on natural resource issues.

Security Council Resolution 1952 (2010)

Natural Resource Targeted: Minerals.

Sanctions:..... Calls upon all States to take appropriate steps to raise awareness of the due diligence guidelines to urge importers, processing industries and consumers of Congolese mineral products to exercise due diligence by applying the aforementioned guidelines. [...] Recommended that all States, particularly those in the region, regularly publish full import and export statistics for natural resources, including gold, cassiterite, coltan, wolframite, timber and charcoal.

Expert Panel:..... Supports taking forward the Group of Experts' recommendations on guidelines for due diligence for importers, processing industries and consumers of Congolese mineral products, [...] Requests Group of Experts to evaluate the impact of due diligence guidelines and continue its collaboration with other forums.

Security Council Resolution 1991 (2011)

Natural Resource Targeted: Minerals.

Peacekeeping Mandate: To support the relevant Congolese authorities in preventing the provision of support to armed groups from illicit economic activities and illicit trade and natural resources, including to carry out spot checks and regular visits to mining sites, trade routes and markets, in the vicinity of the five pilot trading counters.

IRAQ-KUWAIT –United Nations Iraq-Kuwait Observation Mission (UNIKOM)

Budget (billions USD): \$0.6

Years active: 1991-2003

Security Council Resolution 661 (1990)

Natural Resource Targeted: Petroleum.

Sanctions:..... Embargo against importing all commodities and products originating in Iraq or Kuwait.

Security Council Resolution 687 (1991)

Natural Resource Targeted: Petroleum.

Sanctions:..... Decides that the sanction on commodities does not apply to foodstuffs.

Security Council Resolution 986 (1995)

Natural Resource Targeted: Petroleum.

Sanctions:..... Directs the Committee established by Resolution 661 to monitor sale of petroleum exports; Oil for Food programme established.

Security Council Resolution 1153 (1998)

Natural Resource Targeted: Petroleum.

Sanctions:..... Permits the import of petroleum from Iraq and allocates specific distribution to food/nutrition and health sectors on a priority basis.

Expert Panel:..... Establishes Panel of Experts to determine whether Iraq is capable of exporting the amount of petroleum needed, prepare an independent report, and carry out monitoring.

Security Council Resolution 1175 (1998)

Natural Resource Targeted: Petroleum.

Sanctions:..... Authorizes States the export to Iraq of the necessary parts and equipment to enable Iraq to increase the export of petroleum and petroleum products in fixed quantities.

LIBERIA – United Nations Mission in Liberia (UNMIL)

Budget (billions USD): \$5.3

Years active: 2003-ongoing

Security Council Resolution 1343 (2001)

Natural Resource Targeted: Diamonds.

Sanctions:..... Sanction against import of rough diamonds from Liberia; urges certificate of origin regime.

Expert Panel:..... Establishes Panel of Experts to investigate links between exploitation of natural resources and fuelling of conflict.

Security Council Resolution 1478 (2003)

Natural Resource Targeted: Round logs, Timber.

Sanctions:..... Sanctions against import of round logs and timber products.

Security Council Resolution 1509 (2003)

Natural Resource Targeted: Natural resources.

Peacekeeping Mandate: To assist the transitional government in restoring proper administration of natural resources.

Security Council Resolution 1521 (2003)

Natural Resource Targeted: Diamonds, Round logs, Timber.

Peacekeeping Mandate: Welcomes UNMIL’s readiness to assist the Panel of Experts within its capabilities, its areas of deployment and without prejudice to its mandate.

Sanctions:..... Extends diamond, round logs and timber sanctions.

Expert Panel:..... Panel of Experts established to investigate and compile a report on sanctions violations including natural resources.

Security Council Resolution 1579 (2004)

Natural Resource Targeted: Diamonds, Round logs, Timber.

Peacekeeping Mandate: Calls upon UNMIL and the United Nations Missions in Sierra Leone and Côte d’Ivoire to continue assisting the Panel of Experts.

Expert Panel:..... Panel of Experts mandated to assess compliance with sanctions imposed on diamonds and timber.

Security Council Resolution 1607 (2005)

Natural Resource Targeted: Diamonds, Round logs, Timber.

Peacekeeping Mandate: UNMIL to intensify its efforts to assist the National Transitional Government of Liberia in re-establishing its authority throughout Liberia, including diamond-producing and timber-producing areas, and restoring proper administration of natural resources.

Security Council Resolution 1689 (2006)

Natural Resource Targeted: Diamonds, Round logs, Timber.

Sanctions:..... Round logs and timber sanctions lifted. Diamond sanctions extended for an additional six months.

Security Council Resolution 1753 (2007)

Natural Resource Targeted: Diamonds.

Sanctions:..... Diamond sanctions lifted.

Security Council Resolution 1760 (2007)

Natural Resource Targeted: Diamonds, Timber.

Expert Panel:..... Panel of Experts established to assess the implementation of forestry legislation and the Government's compliance with the Kimberley Process.

Security Council Resolution 1961 (2010)

Natural Resource Targeted: Forests and other natural resources.

Expert Panel:..... Panel of Experts maintained to assess the extent to which natural resources and related legislation contribute to peace, security and development; Provide recommendations for natural resources and sustainability.

SIERRA LEONE – United Nations Mission in Sierra Leone (UNAMSIL)

Budget (billions USD): \$2.8

Years active: 1999-2005

Security Council Resolution 1132 (1997)

Natural Resource Targeted: Petroleum.

Sanctions:..... Embargo against selling petroleum to Sierra Leone.

Security Council Resolution 1306 (2000)

Natural Resource Targeted: Diamonds.

Sanctions:..... Embargo against importing rough diamonds from Sierra Leone. Requests an effective Certificate of Origin regime for trade in diamonds is in operation.

Expert Panel:..... Expert Panel established to collect information on possible sanctions violations.

Security Council Resolution 1346 (2001)

Natural Resource Targeted: Diamonds.

Peacekeeping Mandate: Recognized the importance of the legitimate exploitation of the natural resources of Sierra Leone for the benefit of its people and stressed that the UN should continue to support this objective among others.

Security Council Resolution 1446 (2002)

Natural Resource Targeted: Diamonds.

Sanctions:..... Extends diamond sanctions for a period of six months (unless accompanied by a Certificate of Origin).

Security Council Resolution 1562 (2004)

Natural Resource Targeted: Diamonds.

Peacekeeping Mandate: Monitor and support Sierra Leone armed forces and police in patrolling the border and diamond-mining areas, through joint planning and operations.

SUDAN – United Nations Mission in the Sudan (UNMIS)

Budget (billions USD): \$5.7

Years active: 2005-2011

Security Council Resolution 1590 (2005)

Natural Resource Targeted: Land, Water, Oil.

Peacekeeping Mandate: Assist with the implementation of the Comprehensive Peace Agreement (which includes natural resource components).

Security Council Resolution 1870 (2009)

Natural Resource Targeted: Traditional conflict resolution mechanisms including over natural resources.

Peacekeeping Mandate: Strengthen its conflict management capacity by completing as soon as possible its integrated strategy to support local tribal conflict resolution mechanisms in order to maximize protection of civilians.

SUDAN, DARFUR – African Union-United Nations Hybrid Operation in Darfur (UNAMID)

Budget (billions USD): \$7.9

Years active: 2007-ongoing

Security Council Resolution 1769 (2007)

Natural Resource Targeted: Land, Water, Oil.

Peacekeeping Mandate: Assist with the implementation of the Darfur Peace Agreement, which includes natural resource components.

SUDAN, ABYEI – United Nations Interim Security Force in Abyei (UNISFA)

Budget (billions USD): \$0.2

Years active: 2011-ongoing

Security Council Resolution 1990 (2011)

Natural Resource Targeted: Oil.

Peacekeeping Mandate: Provide security for oil infrastructure in the Abyei Area when necessary and in cooperation with the Abyei Police Service.

SOUTH SUDAN – United Nations Mission in the Republic of South Sudan (UNMISS)

Budget (billions USD): \$0.7

Years active: 2011-ongoing

Security Council Resolution 1996 (2011)

Natural Resource Targeted: Natural resources.

Peacekeeping Mandate: Support for peace consolidation and thereby fostering longer term State-building and economic development.

TIMOR-LESTE – United Nations Mission of Support in East Timor (UNTAET)

Budget (billions USD): \$0.4

Years active: 1999-2002

Security Council Resolution 1272 (1999)

Natural Resource Targeted: Natural resources relating to sustainable development.

Peacekeeping Mandate: Assist in the establishment of conditions for sustainable development.

TOTAL

17 Missions

USD 42 billion in Total Budget Expenditures

Annex 2

Key decisions and documents on peacekeeping and natural resources

1. Resolutions and Presidential Statements of the UN Security Council

Global

S/RES/1459 (2003): Kimberley Process Certification Scheme²⁰⁷ “[...] Strongly supports the Kimberley Process Certification Scheme, as well as the ongoing process to refine and implement the regime, adopted at the Interlaken Conference as a valuable contribution against trafficking in conflict diamonds and looks forward to its implementation and strongly encourages the participants to further resolve outstanding issues; Further welcomes the voluntary system of industry self-regulation, as described in the Interlaken Declaration; and stresses that the widest possible participation in the Kimberley Process Certification Scheme is essential and should be encouraged and facilitated and urges all Member States to actively participate in the Scheme.”

S/RES/1625 (2005): Threats to international peace and security²⁰⁸ “[...] Stresses the critical importance of a regional approach to conflict prevention, particularly to programmes of disarmament, demobilization and reintegration, as well as the effective and sustainable reintegration of ex-combatants; [...] Reaffirms its determination to take action against illegal exploitation and trafficking of natural resources and high-value commodities in areas where it contributes to the outbreak, escalation or continuation of armed conflict; [...] Reaffirming the need to adopt a broad strategy of conflict prevention, which addresses the root causes of armed conflict and political and social crises in a comprehensive manner, including by promoting sustainable development, poverty eradication, national reconciliation, good governance, democracy, gender equality, the rule of law and respect for and protection of human rights; [...] Recognizing the need to strengthen the important role of the United Nations in the prevention of violent conflicts, and to develop effective partnerships between the Council and regional organizations, in particular the African Union and its sub-regional organizations, in order to enable early responses to disputes and emerging crises; [...]”

S/PRST/2007/22 (2007): Maintenance of international peace and security (natural resources and conflict)²⁰⁹ “[...] The Security Council recalls the principles of the Charter of the United Nations and in particular the Security Council’s primary responsibility for the maintenance of international peace and security. In this respect, the Security Council recognizes the role that natural resources can play in armed conflict and post-conflict situations; [...] Moreover, the Security Council notes that, in specific armed conflict situations, the exploitation, trafficking, and illicit trade of natural resources have played a role in areas where they have contributed to the outbreak, escalation or continuation of armed conflict. The Security Council, through its various resolutions, has taken measures on this issue, more specifically to prevent illegal exploitation of natural resources, especially diamonds and timber, from fuelling armed conflicts and to encourage transparent and lawful management of natural resources, including the clarification of the responsibility of management of natural resources, and has established sanctions committees and groups and panels of experts to oversee the implementation of those measures; [...] The Security Council acknowledges the crucial role that the Peacebuilding Commission, together with other UN and non-UN actors, can play, in post-conflict situations, in assisting governments, upon their request, in ensuring that natural resources become an engine for sustainable development; [...] The Security Council also stresses that the use, disposal and management of natural resources is a multifaceted and cross-sector issue that involves various UN organizations. In this regard, the Security Council acknowledges the valuable contribution of various UN organizations in promoting lawful, transparent and sustainable management and exploitation of natural resources; [...] The Security Council recognizes, in armed conflict and post-conflict situations, the need for a more coordinated approach by the United Nations, regional organizations and governments concerned, in particular the empowerment of governments in post-conflict situations to better manage their resources. [...]”

S/PRST/2011/15 (2011): Maintenance of international peace and security (climate change and security)²¹⁰ “[...] The Security Council reaffirms its primary responsibility under the Charter of the United Nations for the maintenance of international peace and security. The Council stresses the importance of establishing strategies of conflict prevention. The Security Council

recognizes the responsibility for sustainable development issues, including climate change, conferred upon the General Assembly and the Economic and Social Council. The Security Council [...] reaffirms that the United Nations Framework Convention on Climate Change is the key instrument for addressing climate change; recalls the provisions of the UNFCCC, including the acknowledgement that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions; and invites the relevant organs of the United Nations, as appropriate and within their respective mandates to intensify their efforts in considering and addressing climate change, including its possible security implications; [...] The Security Council expresses its concern that possible adverse effects of climate change may, in the long run, aggravate certain existing threats to international peace and security. The Security Council expresses its concern that possible security implications of loss of territory of some States caused by sea-level rise may arise, in particular in small low-lying island States. The Security Council notes that in matters relating to the maintenance of international peace and security under its consideration, conflict analysis and contextual information on, inter alia, possible security implications of climate change is important, when such issues are drivers of conflict, represent a challenge to the implementation of Council mandates or endanger the process of consolidation of peace. In this regard, the Council requests the Secretary-General to ensure that his reporting to the Council contains such contextual information. [...]"

Angola

S/RES/864 (1993):²¹¹ "[...] Decides, with a view to prohibiting all sale or supply to UNITA of [...] petroleum and petroleum products [...] All States shall prevent the sale or supply [...] of petroleum and petroleum products, whether or not originating in their territory, to the territory of Angola other than through named points of entry on a list to be supplied by the Government of Angola to the Secretary-General, who shall promptly notify the Member States of the United Nations; [...]"

S/RES/1173 (1998):²¹² "[...] Decides also that all States shall take the necessary measures: to prohibit the direct or indirect import from Angola to their territory of all diamonds that are not controlled through the Certificate of Origin regime of the GURN [...] to prohibit, upon notification by the Chairman of the Committee created pursuant to resolution 864 (1993) to all Member States of guidelines approved by that Committee, the sale or supply to persons or entities in areas of Angola to which State administration has not been extended, by their nationals or from their territory, or using their flag vessels or aircraft, of equipment used in mining or mining services; [...]"

S/RES/1237 (1999):²¹³ "[...] Decides to establish the expert panels referred to therein for a period of six months with the following mandate: To collect information and investigate reports, including through visits to the countries concerned, relating to the violation of the measures imposed against UNITA with respect to arms and related material, petroleum and petroleum products, diamonds and the movement of UNITA funds as specified in the relevant resolutions and information on military assistance, including mercenaries; To identify parties aiding and abetting the violations of the abovementioned measures; To recommend measures to end such violations and to improve the implementation of the above-mentioned measures. [...]"

S/RES/1448 (2002):²¹⁴ "[...] Decides that the measures imposed by paragraph 19 of resolution 864 (1993), paragraph 4 (c) and (d) of resolution 1127 (1997) and paragraphs 11 and 12 of resolution 1173 (1998) shall cease to have effect from the date of adoption of this resolution; [...]"

Cambodia

S/RES/792 (1992):²¹⁵ "Supports the decision of the Supreme National Council (SNC) dated 22 September 1992 to set a moratorium on the export of logs from Cambodia in order to protect Cambodia's natural resources; requests States, especially neighboring States, to respect this moratorium by not importing such logs; and requests UNTAC to take appropriate measures to secure the implementation of such moratorium [...] Requests the Supreme National Council to consider the adoption of a similar moratorium on the export of minerals and gems in order to protect Cambodia's natural resources."

S/RES/810 (1993):²¹⁶ "Welcoming the decision taken by the SNC at its meeting on 10 February 1993 to adopt a moratorium on the export of minerals and gems and to consider limits on the export of sawn timber from Cambodia in order to protect Cambodia's natural resources; [...] Commends the decision of the SNC [...] to adopt measures for the protection of Cambodia's natural resources, and supports steps taken by the Technical Advisory Committee on Management and Sustainable Exploitation of Natural Resources to implement these decisions."

Côte d'Ivoire

S/RES/1643 (2005):²¹⁷ "[...] Decides that all States shall take the necessary measures to prevent the import of all rough diamonds from Côte d'Ivoire to their territory, welcomes the measures agreed by participants in the Kimberley Process Certification Scheme to this effect, and calls upon the States in the region which are not participants in the Kimberley

Process to intensify their efforts to join the Kimberley Process in order to increase the effectiveness of monitoring the import of diamonds from Côte d'Ivoire; [...] Requests the Secretary-General, in consultation with the Committee, to re-establish [...] the Group of Experts, with the appropriate range of expertise, in particular on arms, diamonds, finance, customs, civil aviation and any other relevant expertise, to perform the following mandate: [...] To gather and analyse all relevant information in Côte d'Ivoire and elsewhere, in cooperation with the governments of those countries, on flows of arms and related materiel, on provision of assistance, [...] and on the sources of financing, including from the exploitation of natural resources in Côte d'Ivoire, for purchases of arms and related materiel and activities [...] Requests the Secretary-General to communicate as appropriate to the Security Council, through the Committee, information gathered by UNOCI and, when possible, reviewed by the Group of Experts, about the supply of arms and related materiel to Côte d'Ivoire and about the production and illicit export of diamonds [...] Requests also the French Government to communicate as appropriate to the Security Council, through the Committee, information gathered by the French forces and, when possible, reviewed by the Group of Experts, about the supply of arms and related materiel to Côte d'Ivoire and about the production and illicit export of diamonds; [...]"

S/RES/1727 (2006):²¹⁸ “[...] Decides to extend the mandate of the Group of Experts for a further six months, and requests the Secretary-General to take the necessary administrative measures as expeditiously as possible, drawing, as appropriate, on the expertise of the members of the Group of Experts and appointing new members as necessary in consultation with the Committee, this mandate being as follows: to exchange information with UNOCI and the French forces in the context of their monitoring mandate set out in paragraphs 2 and 12 of resolution 1609 (2005); to gather and analyse all relevant information in Côte d'Ivoire and elsewhere, in cooperation with the governments of those countries, on flows of arms and related materiel, on provision of assistance, advice or training related to military activities, on networks operating in violation of the measures imposed by paragraph 7 of resolution 1572 (2004), and on the sources of financing, including from the exploitation of natural resources in Côte d'Ivoire, for purchases of arms and related materiel and activities; [...]"

S/RES/1739 (2007):²¹⁹ “[...] Support for the redeployment of state administration: To facilitate, with the assistance of the African Union, ECOWAS and other international partners, the re-establishment by the Government of Côte d'Ivoire of the authority of the State throughout Côte d'Ivoire and of the institutions and public services essential for the social and economic recovery of the country;”

S/RES/1980 (2011):²²⁰ “[...] Decides to renew until 30 April 2012 the measures on arms and the financial and travel measures imposed by paragraphs 7 to 12 of resolution 1572 (2004), paragraph 5 of resolution 1946 (2010) and paragraph 12 of resolution 1975 (2011) and further decides to renew until 30 April 2012 the measures preventing the importation by any State of all rough diamonds from Côte d'Ivoire imposed by paragraph 6 of resolution 1643 (2005); [...] Decides to extend the mandate of the Group of Experts as set out in paragraph 7 of resolution 1727 (2006) until 30 April 2012 and requests the Secretary-General to take the necessary measures to support its action; [...]"

Democratic Republic of the Congo

S/PRST/2000/20 (2000):²²¹ “[...] The Security Council requests the Secretary-General to establish this panel, for a period of six months, with the following mandate: To follow up on reports and collect information on all activities of illegal exploitation of natural resources and other forms of wealth of the Democratic Republic of the Congo, including in violation of the sovereignty of that country; To research and analyse the links between the exploitation of the natural resources and other forms of wealth in the Democratic Republic of the Congo and the continuation of the conflict; To revert to the Council with recommendations. The Security Council stresses that in order to implement its mandate, the expert panel, which will be based at the United Nations Office at Nairobi, may receive logistical support from the United Nations Organization Mission in the Democratic Republic of the Congo (MONUC) and make visits to various countries of the region, making contact during its visits with diplomatic missions in the capitals concerned, and, if necessary, to other relevant countries; [...]"

S/PRST/2003/21 (2003):²²² “[...] Takes note of the final report (S/2003/1027) of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth in the Democratic Republic of the Congo (the Panel), which concludes its work, and emphasizes the connection, in the context of the continuing conflict, between the illegal exploitation of natural resources and trafficking in raw materials and arms, which the Panel has highlighted; “Condemns the continuing illegal exploitation of natural resources in the Democratic Republic of the Congo, especially in the eastern part of the country, recalls that it has always categorically condemned these activities, which are one of the main elements perpetuating the conflict, and reaffirms the importance of stopping them by exerting, if need be, the necessary pressure on the armed groups, traffickers and all other actors involved; Urges all States concerned, especially those in the region, to take the appropriate steps to end these illegal activities, by proceeding with their own investigations, on the basis, in particular, of information and documentation accumulated by the Panel during its work and forwarded to governments, including through judicial means where possible, and, if necessary, to report to the Council; [...] Emphasizes that the prompt re-establishment, by the Government of National Unity and Transition,

of State authority throughout the territory, and the establishment of competent administrations to protect and control exploitation activities will constitute decisive elements for ending the plundering of natural resources in the Democratic Republic of the Congo; [...]"

S/RES/1533 (2004):²²³ "Requests MONUC to continue to use all means, within its capabilities, to carry out the tasks outlined in paragraph 19 of resolution 1493, and in particular to inspect, without notice as it deems it necessary, the cargo of aircraft and of any transport vehicle using the ports, airports, airfields, military bases and border crossings in North and South Kivu and in Ituri; [...] Urges all States, and especially those in the region, to take the appropriate steps to end these illegal activities, including through judicial means where possible, and, if necessary, to report to the Council. [...] Requests the Secretary-General, in consultation with the Committee, to create, within 30 days from the date of adoption of this resolution, and for a period expiring on 28 July 2004, a Group of Experts [...]"

S/RES/1807 (2008):²²⁴ "Requests the Group of Experts to fulfill the following mandate: To update the Committee on its work as appropriate and report to the Council in writing, on the implementation of the measures set forth [...], with recommendations in this regard, including information on the source of financing, such as from natural resources, which are funding the illicit trade of arms; To keep the Committee frequently updated on its activities; To provide the Committee in its reports with a list, with supporting evidence, of those found to have violated the measures imposed [...] above, and those found to have supported them in such activities for possible future measures by the Council."

S/RES/1856 (2008):²²⁵ "[...] Decides that MONUC shall, from the adoption of this resolution, have the mandate, in this order of priority, working in close cooperation with the Government of the Democratic Republic of the Congo in order to: [...] Use its monitoring and inspection capacities to curtail the provision of support to illegal armed groups derived from illicit trade in natural resources; [...] Urges all States, especially those in the region, to take appropriate steps to end the illicit trade in natural resources, including if necessary through judicial means, and, where necessary, to report to the Security Council, encourages in particular the Government of the Democratic Republic of the Congo, to work with specialist organizations, international financial institutions and MONUC, as well as the countries of the region, to establish a plan for an effective and transparent control over the exploitation of natural resources including through conducting a mapping exercise of the main sites of illegal exploitation; [...]"

S/RES/1857 (2008):²²⁶ "[...] The Security Council decides to renew [...] the financial and travel measures [...]. Decides that the measures [...] shall apply to the following individuals and, as appropriate, entities, as designated by the Committee [including]: Individuals or entities supporting the illegal armed groups in the eastern part of the Democratic Republic of the Congo through illicit trade of natural resources; [...] Decides that the mandate of the Group of Experts [...] shall also include the tasks outlined below: to include in its reports to the Committee any information relevant to the Committee's designation of the individuals and entities described [...] above; to assist the Committee in updating the publicly available reasons for listing and identifying information for individuals and entities referenced [...] above and in compiling narrative summaries; [...] Encourages Member States to take measures, as they deem appropriate, to ensure that importers, processing industries and consumers of Congolese mineral products under their jurisdiction exercise due diligence on their suppliers and on the origin of the minerals they purchase. [...]"

S/RES/1896 (2009):²²⁷ "[...] Decides that the mandate of the Group of Experts [...] shall also include the task to produce, [...] recommendations to the Committee for guidelines for the exercise of due diligence by the importers, processing industries and consumers of mineral products regarding the purchase, sourcing (including steps to be taken to ascertain the origin of mineral products), acquisition and processing of mineral products from the Democratic Republic of the Congo; [...] Calls upon Member States to cooperate fully with the Group of Experts in respect of its mandate [...] of this resolution to develop recommendations for the Committee for guidelines for the exercise of due diligence, in particular by providing details of any relevant national guidelines, licensing requirements or legislation relating to trading in mineral products; [...]"

S/RES/1906 (2009):²²⁸ "[...] Requests MONUC, working in close cooperation with the Government of the Democratic Republic of the Congo, to continue its coordination of operations with the FARDC brigades deployed in the eastern part of the Democratic Republic of the Congo, premised on the protection of civilians as a priority, on operations being jointly planned with these brigades, and in accordance with its Policy Paper referenced in paragraph 23 below, with a view to: [...] Carrying out enhanced efforts to prevent the provision of support to armed groups, including support derived from illicit economic activities and illicit trade in natural resources; [...] Urges all States, especially those in the region, to take appropriate steps to end the illicit trade in natural resources, including if necessary through judicial means, and, where necessary, to report to the Security Council, and urges MONUC, in accordance with [...] resolution 1856 (2008), to consolidate and assess, jointly with the Government of the Democratic Republic of the Congo, its pilot project of bringing together all State services in five trading counters in North and South Kivu in order to improve the traceability of mineral products."

S/RES/1925 (2010):²²⁹ "Decides that MONUSCO shall have the following mandate in this order of priority: [...] With respect to the urgent need to fight illegal exploitation and trade of, natural resources in the Democratic Republic

of the Congo, support the Government's efforts and enhance its capabilities, along with international partners and neighbouring countries, to prevent the provision of support to armed groups, in particular support derived from illicit economic activities and illicit trade in natural resources, and consolidate and assess, jointly with the Government of the Democratic Republic of the Congo, the pilot project of bringing together all State services in five trading counters in North and South Kivu in order to improve the traceability of mineral products[...] Requests the Secretary-General to extend [...] the Group of Experts established pursuant to resolution 1533 (2004) and renewed by subsequent resolutions, with the addition of a sixth expert on natural resources issues."

S/RES/1952 (2010):²³⁰ "[...] Requests the Group of Experts to focus its activities in areas affected by the presence of illegal armed groups, including North and South Kivu and Orientale Province, as well as on regional and international networks providing support to illegal armed groups, criminal networks and perpetrators of serious violations of international humanitarian law and human rights abuses, including those within the national armed forces, operating in the eastern part of the Democratic Republic of the Congo, requests further that the Group of Experts evaluate the impact of due diligence guidelines referred to in paragraph 7 of this resolution and continue its collaboration with other forums. [...] Supports taking forward the Group of Experts' recommendations on guidelines for due diligence for importers, processing industries and consumers of Congolese mineral products, as set out in paragraphs 356 to 369 in part IX of the final report (S/2010/596), to mitigate the risk of further exacerbating the conflict in the eastern part of the Democratic Republic of the Congo [...] Calls upon all States to take appropriate steps to raise awareness of the due diligence guidelines referred to above, and to urge importers, processing industries and consumers of Congolese mineral products to exercise due diligence by applying the aforementioned guidelines, or equivalent guidelines, containing the following steps as described in the final report (S/2010/596): strengthening company management systems, identifying and assessing supply chain risks, designing and implementing strategies to respond to identified risks, conducting independent audits, and publicly disclosing supply chain due diligence and findings; [...] Encourages enhanced cooperation between all States, particularly those in the region, MONUSCO and the Group of Experts and encourages further that all parties and all States ensure cooperation with the Group of Experts by individuals and entities within their jurisdiction or under their control; [...] Recommends that all States, particularly those in the region, regularly publish full import and export statistics for natural resources including gold, cassiterite, coltan, wolframite, timber, and charcoal and enhance information sharing and joint action at the regional level to investigate and combat regional criminal networks and armed groups involved in the illegal exploitation of natural resources; [...]"

S/RES/1991 (2011):²³¹ "[...] Welcomes the initial steps taken by the mining authorities in the Democratic Republic of the Congo and throughout the region to address the tracing and certification of minerals, encourages further demilitarization of the mining areas in the Democratic Republic of the Congo and the professionalization and deployment of Congolese Mining Police in these areas, and calls upon MONUSCO to support the relevant Congolese authorities in preventing the provision of support to armed groups from illicit economic activities and illicit trade and natural resources, including to carry out spot checks and regular visits to mining sites, trade routes and markets, in the vicinity of the five pilot trading counters; [...]"

Iraq-Kuwait

S/RES/661 (1990):²³² "[...] States shall prevent: The import into their territories of all commodities and products originating in Iraq or Kuwait exported there from after the date of the present resolution. [...]"

S/RES/687 (1991):²³³ "[...] Decides, effective immediately, that the prohibitions against the sale or supply to Iraq of commodities or products, other than medicine and health supplies, and prohibitions against financial transactions related thereto contained in resolution 661 (1990) shall not apply to foodstuffs notified to the Security Council Committee established by resolution 661 (1990) concerning the situation between Iraq and Kuwait or, with the approval of that Committee, under the simplified and accelerated "no-objection" procedure, to materials and supplies for essential civilian needs as identified in the report of the Secretary-General dated 20 March 1991, and in any further findings of humanitarian need by the Committee. [...]"

S/RES/986 (1995):²³⁴ "[...] Concerned by the serious nutritional and health situation of the Iraqi population, and by the risk of a further deterioration in this situation, Convinced of the need as a temporary measure to provide for the humanitarian needs of the Iraqi people until the fulfillment by Iraq of the relevant Security Council resolutions, Authorizes States [...] to permit the import of petroleum and petroleum products originating in Iraq, including financial and other essential transactions directly relating thereto, sufficient to produce a sum not exceeding a total of one billion United States dollars every 90 days for the purposes set out in this resolution and subject to the following conditions: [...] Payment of the full amount of each purchase of Iraqi petroleum and petroleum products directly by the purchaser in the State concerned into the escrow account to be established by the Secretary-General for the purposes of this resolution; Directs the Committee established by resolution 661 (1990) to monitor the sale of petroleum and petroleum products to be exported by Iraq via the Kirkuk-Yumurlik pipeline from Iraq to Turkey and from the Mina al-Bakr oil terminal, with the assistance of independent inspection agents appointed by the Secretary-General, who will keep the Committee

informed of the amount of petroleum and petroleum products exported from Iraq [...] Requests the Secretary-General to establish an escrow account for the purposes of this resolution, to appoint independent and certified public accountants to audit it, and to keep the Government of Iraq fully informed; [...] Decides that the funds in the escrow account shall be used to meet the humanitarian needs of the Iraqi population and for the following other purposes, and requests the Secretary-General to use the funds deposited in the escrow account: To finance the export to Iraq, in accordance with the procedures of the Committee established by resolution 661 (1990), of medicine, health supplies, foodstuffs, and materials and supplies for essential civilian needs; [...]"

S/RES/1153 (1998):²³⁵ “[...] Decides further that the authorization given to States by [...] resolution 986 (1995) shall permit the import of petroleum and petroleum products originating in Iraq, including financial and other essential transactions directly relating thereto, sufficient to produce a sum, in the 180-day period [...] not exceeding a total of 5.256 billion United States dollars, of which the amounts recommended by the Secretary-General for the food/nutrition and health sectors should be allocated on a priority basis.[...] Requests the Secretary-General to establish a group of experts to determine in consultation with the Government of Iraq whether Iraq is able to export petroleum or petroleum products sufficient to produce the total sum referred to [...] above and to prepare an independent report on Iraqi production and transportation capacity and necessary monitoring; [...]"

S/RES/1175 (1998):²³⁶ “[...] Authorizes States, subject to the provisions of paragraph 2 below, to permit [...] the export to Iraq of the necessary parts and equipment to enable Iraq to increase the export of petroleum and petroleum products; [...]"

Liberia

S/RES/1343 (2001):²³⁷ “[...] Decides further that all States shall take the necessary measures to prevent the direct or indirect import of all rough diamonds from Liberia, whether or not such diamonds originated in Liberia; [...] Calls upon the Government of Liberia to establish an effective Certificate of Origin regime for trade in rough diamonds that is transparent and internationally verifiable and has been approved by the Committee established by paragraph 14 above, to come into operation after the measures imposed by paragraphs 5 to 7 above have been terminated in accordance with this resolution; [...] Requests the Secretary-General to establish, within one month from the date of adoption of this resolution, in consultation with the Committee established by paragraph 14 above, a Panel of Experts for a period of six months consisting of no more than five members, drawing, as much as possible and as appropriate, on the expertise of the members of the Panel of Experts established pursuant to resolution 1306 (2000), with the following mandate: to investigate any violations of the measures imposed by paragraphs 5 to 7 above; (b) to collect any information on the compliance by the Government of Liberia with the demands in paragraph 2 above, including any violations by the Government of Liberia of the measures imposed by paragraph 2 of resolution 1171 (1998) and paragraph 1 of resolution 1306 (2000); to further investigate possible links between the exploitation of natural resources and other forms of economic activity in Liberia, and the fuelling of conflict in Sierra Leone and neighbouring countries, in particular those areas highlighted by the report of the Panel of Experts established pursuant to resolution 1306 (2000); [...]"

S/RES/1478 (2003):²³⁸ “[...] Stresses that the demands referred to in paragraph 1 above [Resolution 1343] are intended to help consolidate and assure peace and stability in Sierra Leone and to build and strengthen peaceful relations among the countries of the region; Decides that: [...] all States shall take the necessary measures to prevent, for a period of 10 months, the import into their territories of all round logs and timber products originating in Liberia; [...]"

S/RES/1509 (2003):²³⁹ “[...] Decides that UNMIL shall have the following mandate: [...] Support for Implementation of the Peace Process: [...] to assist the transitional government in restoring proper administration of natural resources; [...]"

S/RES/1521 (2003):²⁴⁰ “[...] Decides that all States shall take the necessary measures to prevent the direct or indirect import of all rough diamonds from Liberia to their territory, whether or not such diamonds originated in Liberia; Calls upon the National Transitional Government of Liberia to take urgent steps to establish an effective Certificate of Origin regime for trade in Liberian rough diamonds that is transparent and internationally verifiable with a view to joining the Kimberley Process, and to provide the Committee with a detailed description of the proposed regime; [...] The Security Council encourages the National Transitional Government of Liberia to establish oversight mechanisms for the timber industry that will promote responsible business practices, and to establish transparent accounting and auditing mechanisms to ensure that all government revenues, including those from the Liberian International Ship and Corporate Registry, are not used to fuel conflict or otherwise in violation of the Council’s resolutions but are used for legitimate purposes for the benefit of the Liberian people, including development; [...] Urges all parties to the Comprehensive Peace Agreement of 18 August 2003 to implement fully their commitments and fulfill their responsibilities in the National Transitional Government of Liberia, and not to hinder the restoration of the Government’s authority throughout the country, particularly over natural resources; [...] Decides that all States shall take the necessary measures to prevent the direct or indirect import of all rough diamonds from Liberia to their territory, whether or not such diamonds originated in Liberia [...] Requests the Secretary-General to establish [...] a Panel of Experts to conduct a follow-up assessment mission to Liberia and neighbouring States, in order to investigate and compile a report on the implementation, and any violations, of the measures [...] including any violations involving rebel movements and neighbouring countries,

[...] and including the various sources of financing, such as from natural resources; [...] Welcomes UNMIL's readiness, within its capabilities, its areas of deployment and without prejudice to its mandate, once it is fully deployed and carrying out its core functions, to assist the Committee established by paragraph 21 above and the Panel of Experts established by paragraph 22 above in monitoring the measures in paragraphs 2, 4, 6 and 10 above, and requests the United Nations Mission in Sierra Leone and the United Nations Mission in Côte d'Ivoire, likewise without prejudicing their capacities to carry out their respective mandates, to assist the Committee and the Panel of Experts by passing to the Committee and the Panel any information relevant to the implementation of the measures in paragraphs 2, 4, 6 and 10, in the context of enhanced coordination among United Nations missions and offices in West Africa; [...]"

S/RES/1579 (2004):²⁴¹ “[...] Encourages the National Transitional Government of Liberia to intensify its efforts to meet these conditions, in particular by implementing the Liberia Forest Initiative and the necessary reforms in the Forestry Development Authority, and urges all members of the National Transitional Government to commit themselves to this end for the benefit of the Liberian people; [...] Decides to re-establish the Panel of Experts [...] to undertake the following tasks [...] to conduct a follow-up assessment mission to Liberia and neighbouring States, in order to investigate and compile a report on the implementation, and any violations, of the measures referred to in paragraph 1 above, including [...] the various sources of financing, such as from natural resources, for the illicit trade of arms; [...] Calls upon UNMIL and the United Nations Missions in Sierra Leone and Côte d'Ivoire to continue assisting the Committee and the Panel of Experts in accordance with paragraph 23 of resolution 1521 (2003); [...]"

S/RES/1607 (2005):²⁴² “[...] Urges the National Transitional Government of Liberia to intensify its efforts, with the support of UNMIL, to establish its authority over the diamond producing areas, and to work towards establishing an official Certificate of Origin regime for trade in rough diamonds that is transparent and internationally verifiable, with a view to joining the Kimberley Process; [...] Calls on the National Transitional Government of Liberia urgently to intensify its efforts to reform the Forestry Development Authority, to implement the Liberia Forest Initiative and to implement the Forest Concession Review Committee's recommendations for reform, which will ensure transparency, accountability and sustainable forest management and contribute towards the lifting of the measures on timber set forth in paragraph 10 of resolution 1521 (2003); [...] Invites the National Transitional Government of Liberia to consider, with the assistance of international partners and for a specific time period, the possibility of commissioning independent external advice on the management of Liberia's diamond and timber resources, in order to increase investor confidence and attract additional donor support; Urges UNMIL to intensify its efforts, as mandated in resolution 1509 (2003), to assist the National Transitional Government of Liberia in re-establishing its authority throughout Liberia, including diamond-producing and timber-producing areas, and restoring proper administration of natural resources; [...] Reiterates the importance of UNMIL's continuing assistance to the National Transitional Government of Liberia, the Committee established by paragraph 21 of resolution 1521 (2003) (“the Committee”) and the Panel of Experts, within its capabilities and areas of deployment, and without prejudice to its mandate, in the following areas: monitoring the implementation of the measures in paragraphs 2, 4, 6 and 10 of resolution 1521 (2003) in accordance with paragraph 23 of that resolution; supporting efforts by the Transitional Government to prevent violations of those measures, and reporting any such violations; [...] Decides to re-establish the Panel of Experts appointed pursuant to resolution 1579 (2004) for a further period until 21 December 2005 to undertake the following tasks: to conduct a follow-up assessment mission to Liberia and neighbouring States, in order to investigate and compile a report on the implementation, and any violations, of the measures imposed by resolution 1521 (2003), including any information relevant to the designation by the Committee of the individuals described in paragraph 4 (a) of resolution 1521 (2003) and paragraph 1 of resolution 1532 (2004), and including the various sources of financing, such as from natural resources, for the illicit trade of arms; to assess the impact and effectiveness of the measures imposed by paragraph 1 of resolution 1532 (2004); to assess the progress made towards meeting the conditions for lifting the measures imposed by resolution 1521 (2003); to assess the humanitarian and socio-economic impact of the measures imposed by paragraphs 2, 4, 6 and 10 of resolution 1521 (2003); [...]"

S/RES/1689 (2006):²⁴³ “[...] Decides not to renew the measure in paragraph 10 of resolution 1521 (2003) that obligates Member States to prevent the import into their territories of all round log and timber products originating in Liberia; [...] Further decides that the measures imposed by paragraph 6 of resolution 1521 (2003) shall be renewed for an additional six (6) months with a review by the Council after four (4) months, to allow the Government of Liberia sufficient time to establish an effective Certificate of Origin regime for trade in Liberian rough diamonds that is transparent and internationally verifiable, with a view to joining the Kimberley Process, and calls upon the Government of Liberia to provide the Sanctions Committee, established according to paragraph 21 of resolution 1521 (2003) with a detailed description of the proposed regime; [...]"

S/RES/1753 (2007):²⁴⁴ “[...] Decides to terminate the measures on diamonds imposed by paragraph 6 of resolution 1521 (2003) and renewed by paragraph 1 of resolution 1731 (2006); Encourages the Kimberley Process to report in ninety (90) days to the Council, through the Committee established pursuant to resolution 1521 (2003), on Liberia's application to the Kimberley Process and calls on the Government of Liberia to carry out the recommendations of the expert mission identified for the period following admission to the Kimberley Process Certification Scheme; Decides

to review the termination of the measures in paragraph 6 of resolution 1521 (2003) after consideration of the report of the United Nations Panel of Experts as requested in paragraph 4 (d) of resolution 1731 (2006) and of the report of the Kimberley Process encouraged in paragraph two (2), with a particular focus on the compliance of Liberia with the Kimberley Process Certification Scheme; [...]"

S/RES/1760 (2007):²⁴⁵ "[...] Requests the Secretary-General to establish, within one month from the date of adoption of this resolution, in consultation with the Committee, for a period of six months, a Panel of Experts consisting of up to three members, with the range of expertise necessary to fulfil the Panel's mandate described in this paragraph, drawing as much as possible on the expertise of the members of the Panel of Experts reappointed pursuant to resolution 1731 (2006), to undertake the following tasks: [...] To assess the implementation of forestry legislation passed by the Liberian Congress on 19 September 2006 and signed into law by President Johnson Sirleaf on 5 October 2006, recalling that resolution 1689 (2006) decided not to renew the measure in paragraph 10 of resolution 1521 (2003) that obligated Member States to prevent the import into their territories of all round log and timber products originating in Liberia; to assess the Government of Liberia's compliance with the Kimberley Process Certification Scheme, recalling that resolution 1753 (2007) decided to terminate the measures on diamonds imposed by paragraph 6 of resolution 1521 (2003) and renewed by paragraph 1 of resolution 1731 (2006); [...]"

S/RES/1961 (2010):²⁴⁶ "[...] Decides to extend the mandate of the Panel of Experts appointed pursuant to paragraph 9 of resolution 1903 (2009) for a further period until 16 December 2011 to undertake the following tasks: To conduct two follow-up assessment missions to Liberia and neighbouring States, in order to investigate and compile a midterm and a final report on the implementation, and any violations, of the measures on arms as amended by resolution 1903 (2009), including any information relevant to the designation by the Committee of the individuals described in paragraph 4 (a) of resolution 1521 (2003) and paragraph 1 of resolution 1532 (2004), and including the various sources of financing, such as from natural resources, for the illicit trade of arms; To assess the impact and effectiveness of the measures imposed by paragraph 1 of resolution 1532 (2004), including particularly with respect to the assets of former President Charles Taylor; To identify and make recommendations regarding areas where the capacity of Liberia and the States in the region can be strengthened to facilitate the implementation of the measures imposed by paragraph 4 of resolution 1521 (2003) and paragraph 1 of resolution 1532 (2004); Within the context of Liberia's evolving legal framework, assess the extent to which forests and other natural resources are contributing to peace, security and development rather than to instability and to what extent relevant legislation (National Forestry Reform Law, Lands Commission Act, Community Rights Law with respect to Forest Land, and Liberia Extractive Industries Transparency Initiative Act) and other reform efforts are contributing to this transition, and to provide recommendations, if appropriate, on how such natural resources could better contribute to the country's progress towards sustainable peace and stability; To assess the Government of Liberia's compliance with the Kimberley Process Certification Scheme, and to coordinate with the Kimberley Process in assessing compliance; To provide a midterm report to the Council through the Committee by 1 June 2011 and a final report to the Council through the Committee by 1 December 2011 on all the issues listed in this paragraph, and to provide informal updates to the Committee as appropriate before those dates, especially on progress in the forest sector since the lifting of paragraph 10 of resolution 1521 (2003) in June 2006, and in the diamond sector since the lifting of paragraph 6 of resolution 1521 (2003) in April 2007; To cooperate actively with other relevant panels of experts, in particular that on Côte d'Ivoire re-established by paragraph 9 of resolution 1946 (2010) and that on the Democratic Republic of the Congo re-established by paragraph 5 of resolution 1952 (2010) with respect to natural resources; To cooperate actively with the Kimberley Process Certification Scheme; To assist the Committee in updating the publicly available reasons for listing for entries on the travel ban and assets freeze lists; [...]"

Sierra Leone

S/RES/1132 (1997):²⁴⁷ "[...] Decides that all States shall prevent the sale or supply to Sierra Leone, by their nationals or from their territories, or using their flag vessels or aircraft, of petroleum and petroleum products and arms and related material of all types, including weapons and ammunition, military vehicles and equipment, paramilitary equipment and spare parts for the aforementioned, whether or not originating in their territory; [...] Acting also under Chapter VIII of the Charter of the United Nations, authorizes ECOWAS, cooperating with the democratically-elected Government of Sierra Leone, to ensure strict implementation of the provisions of this resolution relating to the supply of petroleum and petroleum products, and arms and related material of all types, including, where necessary and in conformity with applicable international standards, by halting inward maritime shipping in order to inspect and verify their cargoes and destinations; [...]"

S/RES/1306 (2000):²⁴⁸ "[...] Decides that all States shall take the necessary measures to prohibit the direct or indirect import of all rough diamonds from Sierra Leone to their territory; [...] Requests the Government of Sierra Leone to ensure, as a matter of urgency, that an effective Certificate of Origin regime for trade in diamonds is in operation in Sierra Leone; [...] Stresses the need for the extension of government authority to the diamond-producing areas for a durable solution to the problem of illegal exploitation of diamonds in Sierra Leone; [...] Requests the Secretary-General, in consultation with the Committee, to establish a panel of experts, for an initial period of four months, consisting of no more than five members: To collect information on possible violations of the measures imposed by paragraph 2 of resolution 1171 (1998) and the link between trade in diamonds and trade in arms and related material including

through visits to Sierra Leone and other States as appropriate, and making contact with those they consider appropriate, including diplomatic missions; [...]"

S/RES/1346 (2001):²⁴⁹ "[...] Recognizing the importance of the progressive extension of State authority throughout the entire country, political dialogue and national reconciliation, the full implementation of a disarmament, demobilization and reintegration programme, the legitimate exploitation of the natural resources of Sierra Leone for the benefit of its people, full respect for the human rights of all and the rule of law, effective action on the issues of impunity and accountability, the voluntary and unhindered return of refugees and internally displaced persons, the holding by the Government of Sierra Leone of free, fair and transparent elections, and the formulation of a long-term plan for the peace process in order to achieve sustainable peace and security in Sierra Leone, and stressing that the United Nations should continue to support the fulfilment of these objectives; [...]"

S/RES/1446 (2002):²⁵⁰ "[...]Decides that the measures imposed by paragraph 1 of resolution 1306 (2000) shall remain in force for a new period of six months from 5 December 2002, except that, pursuant to paragraph 5 of resolution 1306 (2000), rough diamonds controlled by the Government of Sierra Leone under the Certificate of Origin regime shall continue to be exempt from these measures, and affirms that at the end of this period it will review the situation in Sierra Leone, including the extent of the Government's authority over the diamond-producing areas, in order to decide whether to extend these measures for a further period and, if necessary, to modify them or adopt further measures; [...]"

S/RES/1562 (2004):²⁵¹ "[...]To monitor, in conjunction with district and provincial security committees, the overall security situation, to support the Sierra Leone armed forces and police in patrolling the border and diamond-mining areas, including through joint planning and joint operations where appropriate, and to monitor the growing capacity of the Sierra Leone security sector; [...]"

Sudan

S/RES/1590 (2005):²⁵² "[...] Decides that the mandate of UNMIS shall be the following: To support implementation of the Comprehensive Peace Agreement by performing the following tasks: To assist the parties to the Comprehensive Peace Agreement, in addressing the need for a national inclusive approach, including the role of women, towards reconciliation and peacebuilding; [...] To assist the parties to the Comprehensive Peace Agreement in promoting the rule of law, including an independent judiciary, and the protection of human rights of all people of Sudan through a comprehensive and coordinated strategy with the aim of combating impunity and contributing to long-term peace and stability and to assist the parties to the Comprehensive Peace Agreement to develop and consolidate the national legal framework; [...]"

Relevant text within the **Comprehensive Peace Agreement:**²⁵³ The Parties agree "That the best known practices in the sustainable utilization and control of natural resources shall be followed. [...]This Agreement sets out the respective types of income, revenue, taxes and other sources of wealth to which the various levels of government are entitled. [...]The Parties agree that the regulation, management, and the process for the sharing of wealth from subterranean natural resources are addressed below. [...] The Parties record that the regulation of land tenure, usage and exercise of rights in land is to be a concurrent competency exercised at the appropriate levels of government.

Sudan, Darfur

S/RES/1769 (2007):²⁵⁴ "[...] Decides, that UNAMID is authorised to take the necessary action, in the areas of deployment of its forces and as it deems within its capabilities in order to: support early and effective implementation of the Darfur Peace Agreement, prevent the disruption of its implementation and armed attacks; [...]"

Relevant text within the **Darfur Peace Agreement:**²⁵⁵ "The Parties agree to establish a mechanism to introduce processes for ensuring the sustainable use and control of land and other natural resources, and to ensure that all citizens affected by development of land and other natural resources are consulted and their views taken into account in carrying out that development. Persons whose property or livelihood are adversely affected by development of land and other natural resources have a right to adequate compensation. [...]The Parties agree that States in which oil or mineral resources are produced shall have the right to negotiate and to be granted the negotiated share of revenue generated there from [...]"

S/RES/1870 (2009):²⁵⁶ "[...]calls upon UNMIS to strengthen its conflict management capacity by completing as soon as possible its integrated strategy to support local tribal conflict resolution mechanisms in order to maximize protection of civilians; [...]"

Sudan, Abyei

S/RES/1990 (2011):²⁵⁷ "[...] Decides that UNISFA shall have the following mandate [...] Strengthen the capacity of the Abyei Police Service by providing support, including the training of personnel, and coordinate with the Abyei Police Service on matters of law and order, and when necessary and in cooperation with the Abyei Police Service, provide security for oil infrastructure in the Abyei Area; [...]"

South Sudan

S/RES/1996 (2011):²⁵⁸ “[...] Emphasizing the vital role of the United Nations to support national authorities, in close consultation with international partners, to consolidate the peace and prevent a return to violence and therefore to develop an early strategy in support of national peacebuilding priorities, including establishment of core government functions, provision of basic services, establishment of the rule of law, respect for human rights, management of natural resources, development of the security sector, tackling youth unemployment, and revitalization of the economy [...] Recognizing the importance of supporting peacebuilding efforts in order to lay the foundation for sustainable development. [...] The mandate of UNMISS shall be to consolidate peace and security, and to help establish the conditions for development in the Republic of South Sudan, with a view to strengthening the capacity of the Government of the Republic of South Sudan to govern effectively and democratically and establish good relations with its neighbours, and accordingly authorizes UNMISS to perform the following tasks; Support for peace consolidation and thereby fostering longer-term statebuilding and economic development.”

Timor-Leste

S/RES/1272 (1999):²⁵⁹ “Decides to establish, in accordance with the report of the Secretary-General, a United Nations Transitional Administration in East Timor (UNTAET), which will be endowed with overall responsibility for the administration of East Timor and will be empowered to exercise all legislative and executive authority, including the administration of justice; Decides also that the mandate of UNTAET shall consist of the following elements; [...] To assist in the establishment of conditions for sustainable development.”

2. Reports and Resolutions of the UN General Assembly

A/56/4 (2001): Observance of the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict:²⁶⁰ “[...]Considering that damage to the environment in times of armed conflict impairs ecosystems and natural resources long beyond the period of conflict, and often extends beyond the limits of national territories and the present generation, Recalling Article 2, paragraph 4, of the Charter of the United Nations, which states that all Member States shall refrain from the threat or use of force against the territorial integrity of any State in their international relations, Declares 6 November each year as the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict [...] Requests the Secretary-General to ensure the implementation of the present resolution and to promote it in the international community.”

A/65/19 (2011): Report of the Special Committee on Peacekeeping Operations:²⁶¹ “[...] The Special Committee requests that when developing modules, the Secretariat take into account the importance of reducing the environmental footprint of United Nations field missions. [...]The Special Committee takes note of the Environmental Policy for United Nations Field Missions developed by the Department of Peacekeeping Operations and the Department of Field Support, and stresses the importance of peacekeeping missions’ taking steps aimed at implementing sound environmental practices. The Special Committee recommends that the Secretariat brief the Committee on United Nations environmental policy, as it relates to field missions, before the Committee’s next session. [...]”

A/65/743 (2011): Observations and recommendations on cross-cutting issues related to peacekeeping operations. Report of the Advisory Committee on Administrative and Budgetary Questions:²⁶² “[...] The Advisory Committee expects that environmental conditions will be taken into account in determining whether items available through systems contracts are suitable for service in a particular location. The prevailing environmental conditions should also be a factor in establishing the appropriate replacement cycles for equipment in each peacekeeping operation. [...] Environmental policy: Responding to the request of the General Assembly in its resolution 64/269, paragraphs 92 to 96 of the overview report of the Secretary-General provide detailed information on the measures being undertaken to mitigate the environmental impact of peacekeeping operations. The Secretary-General highlights the fact that peacekeeping operations represented 56 per cent of total greenhouse gas emissions by the United Nations in 2008, with the main sources being aviation, surface transport and facilities operations (A/65/715, para. 92). The report describes a number of initiatives designed to reduce the environmental impact, including a reduction in the air fleet and the increased use of solar water pumps, water heaters and photovoltaic-diesel hybrid power supply units. [...]In its resolution 64/269, the General Assembly requested the Secretary-General to provide detailed information on the measures undertaken to mitigate the environmental impact of peacekeeping missions in the context of his next overview report. Peacekeeping operations represented 56 per cent of the total United Nations wide 2008 greenhouse gas emissions. The main sources of these emissions are from aviation, surface transport and facilities operations.”

A/65/890 (2011): Administrative and budgetary aspects of the financing of the United Nations peacekeeping operations Report of the Fifth Committee:²⁶³ “Request the Secretary-General to report to the General Assembly at its resumed 67th session in the context of its overview report on all aspects of fuel management including on implementation of the Fuel Operations Manual; the feasibility of introducing a global electronic fuel management system; the status of strategic reserve stocks of

fuel for contingency purposes; the preparation and application of standard operating procedures for fuel management; the results of the assessment of fuel support costs and performance for several missions, including the comparison of turnkey and inhouse models; and on efforts aimed at factoring the cost of fuel when awarding contracts for vehicles and aircraft [...] Requests the Secretary-General to continue to ensure that the utilization of systems contracts is subject to prior full analysis of all costs, in accordance with current practice[...]Recalls paragraph 77 of the report of the Advisory Committee on Administrative and Budgetary Questions and stresses the need to evaluate the full range and overall cost efficiency of factors involved in air services, including fuel consumption, maintenance costs, and safety and security considerations."

3. Policy Reports of the UN Secretary-General and High-Level Panels

A/55/305 - S/2000/809 (2000): Report of the Panel on United Nations Peace Operations "Brahimi Report":²⁶⁴ "The United Nations was founded, in the words of its Charter, in order 'to save succeeding generations from the scourge of war.' Meeting this challenge is the most important function of the Organization, and, to a very significant degree, the yardstick by which it is judged by the peoples it exists to serve. Over the last decade, the United Nations has repeatedly failed to meet the challenge; and it can do no better today. Without significant institutional change, increased financial support, and renewed commitment on the part of Member States, the United Nations will not be capable of executing the critical peacekeeping and peace-building tasks that the Member States assign it in coming months and years [...] The Panel endorses the recommendations of the Secretary-General with respect to conflict prevention contained in the Millennium Report and in his remarks before the Security Council's second open meeting on conflict prevention in July 2000, in particular his appeal to 'all who are engaged in conflict prevention and development — the United Nations, the Bretton Woods institutions, Governments and civil society organizations — [to] address these challenges in a more integrated fashion.' The Panel supports the Secretary-General's more frequent use of fact-finding missions to areas of tension, and stresses Member States' obligations, under Article 2(5) of the Charter, to give "every assistance" to such activities of the United Nations. [...] Variables that affect the difficulty of peace implementation include, first, the source of the conflict. These can range from economics (e.g., issues of poverty, distribution, discrimination or corruption), politics (an unalloyed contest for power and resource and other environmental issues (such as competition for scarce water) to issues of ethnicity, religion or gross violations of human rights. [...] A small percentage of a mission's first-year budget should be made available to the representative or special representative of the Secretary-General leading the mission to fund quick impact projects in its area of operations, with the advice of the United Nations country team's resident coordinator; The Panel recommends that the legislative bodies consider bringing demobilization and reintegration programmes into the assessed budgets of complex peace operations for the first phase of an operation in order to facilitate the rapid disassembly of fighting factions and reduce the likelihood of resumed conflict; The Panel recommends that the Executive Committee on Peace and Security (ECPS) discuss and recommend to the Secretary-General a plan to strengthen the permanent capacity of the United Nations to develop peace-building strategies and to implement programmes in support of those strategies [...] Once deployed, United Nations peacekeepers must be able to carry out their mandates professionally and successfully and be capable of defending themselves, other mission components and the mission's mandate, with robust rules of engagement, against those who renege on their commitments to a peace accord or otherwise seek to undermine it by violence."

A/58/323 (2003): Implementation of the United Nations Millennium Declaration: Report of the Secretary-General:²⁶⁵ "The more immediate concern for most of our fellow human beings is with 'soft threats' to their security, such as those posed by environmental problems ... and simple poverty, which makes people more vulnerable to threats of almost every kind; [...] The implications of the security of a number of natural resources, the mismanagement or depletion of such resources and unequal access to them should also be recognized as potential causes of conflict and should be more systematically addressed as such by the international community."

A/59/565 (2004): A More Secure World: Our Shared Responsibility - Report of the Secretary-General's High-level Panel on Threats, Challenges and Change:²⁶⁶ "Today, more than ever before, threats are interrelated and a threat to one is a threat to all. The mutual vulnerability of weak and strong has never been clearer [...] Poverty, infectious disease, environmental degradation and war feed one another in a deadly cycle [...] Environmental stress, caused by large populations and shortages of land and other natural resources, can contribute to civil violence [...] Environmental degradation has enhanced the destructive potential of natural disasters and in some cases hastened their occurrence. The dramatic increase in major disasters witnessed in the last 50 years provides worrying evidence of this trend. More than two billion people were affected by such disasters in the last decade, and in the same period the economic toll surpassed that of the previous four decades combined. If climate change produces more acute flooding, heat waves, droughts and storms, this pace may accelerate [...] Rarely are environmental concerns factored into security, development or humanitarian strategies. Nor is there coherence in environmental protection efforts at the global level. Most attempts to create governance structures to tackle the problems of global environmental degradation have not effectively addressed climate change, deforestation and desertification. Regional and global multilateral treaties on the environment are undermined by inadequate implementation and enforcement by the Member States."

A/63/881-S/2009/304 (2009): Report of the Secretary-General on peacebuilding in the immediate aftermath of conflict:²⁶⁷

“Despite their diversity, the initial post-conflict period in most countries is characterized by significant insecurity and political uncertainty.[...] Failure to restore State authority, particularly in remote border areas, may create new sources of threat or permit wartime practices of smuggling or illegal trade in natural resources to persist or even expand, undermining State revenue. [...] There will always be additional country-specific priorities such as organized crime and natural resources management. [...] Seizing the window of opportunity in the immediate aftermath of conflict requires that international actors are, at a minimum, capable of responding coherently, rapidly and effectively in these areas, which relate directly to the core objectives mentioned above. They are: Support to basic safety and security, including mine action, protection of civilians, disarmament, demobilization and reintegration, strengthening the rule of law and initiation of security sector reform; Support to political processes, including electoral processes, promoting inclusive dialogue and reconciliation, and developing conflict-management capacity at national and subnational levels; Support to the provision of basic services, such as water and sanitation, health and primary education, and support to the safe and sustainable return and reintegration of internally displaced persons and refugees; [...] Ensuring a rapid and effective response in countries devastated by conflict requires augmenting the existing capacity on the ground and deploying additional international civilian capacity in areas such as the rapid restoration of agricultural production or effective management of natural resources. [...]The “cluster approach” is seeking to strengthen the predictability and coherence of humanitarian response by establishing global leads in specific areas: agriculture, camp coordination/management, early recovery, education, emergency shelter, emergency telecommunications, health, logistics, nutrition, protection, and water, sanitation and hygiene. Cross-cutting issues such as gender, human rights and the environment are also represented by specific technical focal points. This approach encourages United Nations agencies, funds and programmes to invest in building their own response capacities in the area they support, as well as to identify gaps in knowledge and capacity in the sector as a whole and to build capacity with partners at both global and national levels to be able to fill these gaps.”

A/64/350 (2009): Climate change and its possible security implications: Report of the Secretary-General:²⁶⁸ “Climate change is often viewed as a “threat multiplier”, exacerbating threats caused by persistent poverty, weak institutions for resource management and conflict resolution, fault lines and a history of mistrust between communities and nations, and inadequate access to information or resources. [...] Both governmental views and relevant research on the security implications of climate change, by and large, approach the question from a perspective of interdependence between human vulnerability and national security. They identify five channels through which climate change could affect security: (1) Vulnerability: climate change threatens food security and human health, and increases human exposure to extreme events; (2) Development: if climate change results in slowing down or reversing the development process, this will exacerbate vulnerability and could undermine the capacity of States to maintain stability; (3) Coping and security: migration, competition over natural resources and other coping responses of households and communities faced with climate-related threats could increase the risk of domestic conflict as well as have international repercussions; (4) Statelessness: there are implications for rights, security, and sovereignty of the loss of statehood because of the disappearance of territory; (5) *International conflict*: there may be implications for international cooperation from climate change’s impact on shared or undemarcated international resources.”

A/64/633 (2010): Report of the Secretary General on the Global Field Support Strategy:²⁶⁹ “The mission impact objectives are to: (a) Fully utilize local and regional investment and capacity; (b) Reduce the in-country environmental impact of peacekeeping and field-based special political missions [...] The goal of the plan for change in the provision of support to field missions is to deliver timely, high-quality integrated services to missions. That will translate into missions that are deployed faster, that afford maximum safety and security for civilian, military and police personnel from the start, that provide staff with improved quality of life while on mission and that have a reduced environmental impact while utilizing fully local and regional capacities [...] Concerning predefined modules for goods and services, the strategy is mission-focused and seeks to create service-delivery packages that meet field deployment requirements on missions’ terms. The need to provide safe, appropriate living and working facilities, for example, will be addressed as a “service package”, as opposed to a series of discrete services (project budget allocation, procurement, engineering design, labour, etc.), which require integration at the mission level and by mission staff. Service packages will align equipment with enabling capacities, provide scalability and flexibility to adapt to changing realities on the ground, and be self-sustainable and environmentally efficient. Building on lessons learned in the area of deployment, the Secretariat will develop a menu of modular solutions that will combine equipment with enablers to arrive at service packages to meet mission needs [...] This long-term goal for service packages will be implemented in stages. The work of modularizing certain functions into service packages and establishing product sheets and usage instructions will be launched through a review of the strategic deployment stocks and the systems contracts that are currently available. Subsequent to this review, development will be undertaken of the first product sheets and service packages for security perimeters, black- and grey-water waste management systems, camp waste-management systems, pre-engineered steel buildings, headquarters and sector headquarters green-field templates, inter alia.”

A/64/866-S/2010/386 (2010): Progress report of the Secretary-General on peacebuilding in the immediate aftermath of conflict:²⁷⁰ “There continues to be a serious gap in national capacities to ensure a stable transition from conflict to sustainable peace and development: the inability of national and community level actors to manage or resolve new or recurrent tensions that might spark renewed conflict. The United Nations has accelerated work to address this gap, developing guidance and training programmes to reinforce national capacity in conflict management, from natural

resources to implementation of peace agreements. [...] Natural resources as an area “of increasing concern where greater efforts will be needed to deliver a more effective United Nations response. [...] A recent study by the United Nations Environment Programme concluded that 40 percent of internal conflicts over a 60-year period were associated with land and natural resources, and that this link doubles the risk of conflict relapse in the first five years. Efforts have been made to draw early attention to these risks and to improve inter-agency coordination to address them, including by strengthening national capacity to prevent disputes over land and natural resources. [...] Examples include programmes in Afghanistan, Timor-Leste and the Sudan, where coordination among several United Nations entities addressing land and natural resource management has demonstrated the importance of an inclusive approach. In order to further deliver on the ground I call on Member States and the United Nations system to make questions of natural resource allocation, ownership and access an integral part of peacebuilding strategies.”

A/65/715 (2011): Report of the Secretary-General on Overview of the financing of the United Nations peacekeeping operations: budget performance for the period from 1 July 2009 to 30 June 2010 and budget for the period from 1 July 2011 to 30 June 2012:²⁷¹ “United Nations field missions are taking measures to treat and reuse wastewater to limit pollution of the local environment and any negative health impact on neighbouring communities. Wastewater treatment plants are available through a systems contract [...] The global field support strategy identified waste management as a major challenge of current field missions. The modularization pillar of the strategy includes camp (solid and liquid) waste-management systems in phase one of development. Peacekeeping missions are reducing the volume of waste for disposal [...] In its resolution 64/269, the General Assembly requested the Secretary-General to provide detailed information on the measures undertaken to mitigate the environmental impact of peacekeeping missions in the context of his next overview report. Peacekeeping operations represented 56 per cent of the total United Nations wide 2008 greenhouse gas emissions. The main sources of these emissions are from aviation, surface transport and facilities operations.”

A/65/741 (2011): Report of the Secretary-General on Disarmament, Demobilisation and Reintegration:²⁷² “Regional aspects of post-conflict environments have also presented challenges to reintegration programmes, particularly in the attempt to undertake coordinated approaches with multiple actors, including Governments, United Nations entities and other participating organizations. Key regional issues affecting the reintegration of ex-combatants include the flow of small arms and light weapons; trafficking in natural resources; cross-border recruitment, including that of children; and the repatriation and reintegration of foreign ex-combatants in their countries of origin. [...] Closer attention should be paid to the linkages between reintegration and natural resources management. It is recognized that natural resources often play a role in fuelling conflicts and undermining peacebuilding efforts. Armed groups have frequently relied on the exploitation of natural resources to finance war efforts and to attract recruits. A better understanding of the complex relationship between conflict and natural resources, including how it can be addressed to support the reintegration of ex-combatants and associated groups, can contribute to the sustainability of reintegration programmes. [...] Integrating natural resource management into disarmament, demobilization and reintegration is particularly important given the role that natural resources often play as a source of revenue for conflict activities. While more than 80 percent of programmes support the reintegration of ex-combatants into agriculture, where access to land is fundamental, some programmes have also started to explore income-generating opportunities in ecosystem rehabilitation, reforestation, forestry, conservation and even ecotourism through value chain approaches and partnerships with the private sector. [...] Addressing the involvement of ex-combatants in the illegal exploitation of natural resources requires not only promotion of alternative livelihoods but also the strengthening of State authority over natural resource management. [...]”

A/65/747-S/2011/85: Civilian capacity in the aftermath of conflict - Independent report of the Senior Advisory Group:²⁷³ “[...] The United Nations has some of the core capacities needed in the aftermath of conflict, but these capacities are uneven and there is confusion as to who does what. This leads to duplication and to unfilled capacity gaps that jeopardize the United Nations ability to support conflict-affected States. These gaps are: (a) In the area of basic safety and security: disarmament, demobilization and reintegration; police; and security sector reform and governance; (b) In the area of justice: corrections; criminal justice; and judicial and legal reform; (c) In the area of inclusive political processes: political party development; and public information; (d) In the area of core government functionality: aid coordination; legislative branch; and public financial management; (e) In the area of economic revitalization: employment generation; natural resource management; and private sector development. [...] Recommendations of the Senior Advisory Group: [...] Establish a cluster system for core areas of activity in the aftermath of conflict. As in the humanitarian system, there should be cluster leads for all areas. In Table 2 (see p. 27) are proposed cluster and subcluster leads, based on existing capacities [...] Cluster: Economic Revitalization led by the World Bank with a subcluster on natural resources led by UNEP [...]”

A/66/679 (2012): Report of the Secretary-General on overview of the financing of the United Nations peacekeeping operations: budget performance for the period 1 July 2010 to 30 June 2011 and budget for the period from 1 July 2012 to 30 June 2013:²⁷⁴ “[...] A growing number of missions have introduced initiatives to minimize negative impacts of the peacekeeping footprint. In its report A/65/743, the Advisory Committee welcomed the initiatives that DFS has taken to mitigate the environmental impact of peacekeeping missions and it requested that the measures deemed most effective should be shared across all peacekeeping operations. [...] Some missions have established positions for a

dedicated Environmental Officer and the remainder has a designated Environmental Focal Point. All belong to a network coordinated by the Environmental Officer in the Logistics Support Division, DFS. [...] Best practices for environmental management are shared among all environmental focal points through a dedicated web-based Community of Practice that is reinforced by direct email exchanges. [...] Upon receipt of the information, Environmental Focal Points assess the feasibility of similar actions in their respective missions and recommend their implementation if possible. Environmental best practices also are shared with respective sections in Headquarters when there is a clear link with their respective areas of responsibility.”

4. UN Policies and Operational Guidance

Handbook on United Nations Multidimensional Peacekeeping Operations (2003):²⁷⁵ “[...] Enforcement of sanctions. The enforcement of sanctions authorized by the Security Council, particularly arms and materiel embargoes, may be tasked to a military component of a peacekeeping operation. Restoration and maintenance of law and order. In situations where there is no effective national or international policing capability, the military component may be tasked to assist in the restoration and maintenance of law and order. This is not normally a military task and requires significant specialized training. For these reasons, maintenance of law and order will be a task for the military only in exceptional circumstances, with the goal of returning to civilian policing as soon as possible.”

Practical Guide to Multilateral Needs Assessments in Post-Conflict Situations (2004):²⁷⁶ “[...] Conflict is also likely to resume where the root causes of the conflict remain unchanged. These may include unequal access to land, education and services, the discrimination of certain religious, ethnic or regional groups, competition over natural resources or resentment caused by bad governance. To sustain the peace process, conflict parties need to be confident early on that their grievances will be addressed. The PCNA should identify key grievances that could re-ignite conflict and propose actions that the national authorities and international community can undertake to mitigate them. [...] Cross-cutting issues affect all or a substantial number of sectors important for post-conflict recovery and should therefore be considered in every cluster/sector analysis. Typical cross-cutting issues are: [...] Environment: armed conflict usually causes significant damage to the natural environment (e.g., land mines and unexploded ordnance, scorched earth tactics, and decay of resource management systems). Control of territory and natural resources are among key issues leading to violent conflict. [...] Cross-cutting specialists have the responsibility to secure the incorporation of their thematic areas (e.g., gender, environment, etc.) in the relevant cluster work. They provide their expertise both to the overall PCNA coordinator as well as to the cluster managers or individual cluster team members. They have to adapt the cross-cutting checklist based on their analysis and discussion with the relevant cluster managers and provide analytical input for the cluster teams. They also should review cluster reports and frameworks to validate the incorporation of cross-cutting issues. [...] See Annex 27: Cross-cutting checklists (Gender, Human Rights, Environment, Security) [...]”

Joint Guidance Note on Integrated Recovery Planning using Post Conflict Needs Assessments and Transitional Results Frameworks (2007):²⁷⁷ “[...] Regardless of the amount of time available for the pre-assessment, identifying causes and characteristics of the conflict will be particularly important; some key historical elements for consideration in understanding the context may be: Core nature of the conflict – driven by social, political, economic, geographic factors (e.g. control over natural resources, historical territorial borders, ethnic or religious divisions; [...] Decisions on how to handle issues that have historically been treated as “cross-cutting” are considered within the country-specific context; there is no automatic position for a specific cross-cutting topic, but in a country where exploitation of natural resources has been a core factor in the conflict, consideration of common environmental resources would logically be a priority topic. [...] The TRF should provide for some actions that are visible to the general public and can generate modest but tangible “quick wins” that deepen or broaden national ownership and support for the peace or transition process. These should be accompanied by less visible actions – in the area of institutional capacity building and reform, transparency, and governance of natural resources, for example – that must be initiated early on even though their benefits will not be felt for some time. These are critical to underpinning future governance, state capacity and accountability, without which ownership of the process risks becoming nominal, rather than national, and can lead to a reversion of gains at a later date. Incorporating state-building as a central objective of the TRF is discussed in more detail in section III.”

United Nations Peacekeeping Operations: Principles and Guidelines (2008). [...] **The Normative Framework for United Nations Peacekeeping Operations:**²⁷⁸ “[...] International humanitarian law is known also as “the law of war” or “the law of armed conflict,” and restricts the means and methods of armed conflict. International humanitarian law is contained in the four Geneva Conventions of 1949 and their two Additional Protocols of 1977, as well as in rules regulating the means and methods of combat. International humanitarian law also includes conventions and treaties on the protection of cultural property and the environment during armed conflict, as well as protection of victims of conflict. [...]”

IMPP Guidelines: Role of Headquarters – Integrated Planning for UN Field Presences (2009):²⁷⁹ “[...] Annex 5: DPKO-led Technical Assessment Missions Guidelines - Checklist of Questions on Doctrinal Fundamentals. [...] The following questions are to support the Team Leader’s overall assessment of an appropriate UN response and to support analysis of the overall mission concept of operations following inputs from all of the technical elements of the assessment mission. Have any potential adverse effects of the mission been taken into consideration and is there a mission impact management element in

the operational concept? What baseline data/information exists and can be collected in advance of the mission and during the mission to assess and manage mission impact? What is the potential economic impact? What is the potential environmental impact? If not actual impact, what perceptions of mission impact might the mission generate? What conduct and discipline issues will be essential to manage from the outset? What resources are required to manage mission impact? [...]"

Charting a New Horizon for Peacekeeping Operations: A New Partnership Agenda (2009):²⁸⁰ "[...] Threats such as environmental changes, economic shocks, transnational crime and extremism threaten many States and contribute to growing political and security instability. [...] Taken together, the challenges described above have stretched UN peacekeeping to its limits. Yet demands could well continue to increase. Volatile commodity prices and financial markets, transnational organized crime and environmental changes may lead to political and security instability where societies lack the resources to cope with such shocks. Countries emerging from conflict are particularly vulnerable. The risk that these threats will be met with limited or partial responses is real. The global economic crisis is forcing many governments and organizations to scale back conflict management, humanitarian and development assistance. Military and police capabilities globally are in greater demand. Stretched bilateral and regional capacities increase the likelihood of UN peacekeeping being called upon to act as an instrument of last resort, yet with fewer resources and diminished support. Effective arrangements for equipping and sustaining UN peacekeepers are also critical for building future capacity. [...] New peacekeeping tasks demand new equipment, from night vision and modern communication equipment, to naval vessels. The UN also needs access to new technologies for better situational awareness in the field. A more environmentally responsible approach requires new thinking and capabilities. [...] United Nations peacekeeping needs a new horizon – a set of shared and achievable goals for the global peacekeeping partnership. [...]"

PCNA-TRF Tool Kit: Note on Addressing Environmental Issues (2009):²⁸¹ "[...] Where conflict analyses are conducted, particular attention has to be paid to the links between environment, conflict and peace consolidation. Overlooking or failing to prioritize environmental needs adequately presents risks to human health, livelihoods and the maintenance of ecosystem services. Bearing in mind the important role environment plays in populations' lives and the economies of most post-conflict countries, all of these risk factors can negatively impact sustained peace and recovery. Pre-existing chronic environmental problems pre-dating the conflict, e.g. land degradation, must be addressed in order to ensure sustainable recovery and reconstruction, especially where they affect livelihoods. [...] Natural resources and the environment underlie key peace-building interventions (see Annex I); they are critically important in articulating a peace dividend; they can contribute to stabilisation, conflict transformation, and to preventing the falling back into conflict during a fragile peace process. In other words, the way they are addressed, including early on as part of a PCNA process, and managed can influence the success or failure of the process itself. Deferred action or poor choices regarding natural resources and the environment are easily "locked in", establishing unsustainable trajectories of recovery that can potentially undermine the fragile foundations of peace. [...]"

UN Strategic Assessment Guidelines (2009):²⁸² "These guidelines outline a process for UN staff to conduct an interdepartmental and inter-agency Strategic Assessment of a political crisis, conflict or post-conflict situation. The Strategic Assessment provides a mechanism for joint analysis and strategic discussions that cut across the political, security, development, humanitarian and human rights aspects of the UN's work. It brings together the key UN departments and agencies in each of these areas and is intended to allow senior decision-makers, in particular the Secretary-General, to consider new or re-oriented forms of UN engagement based on the country's needs. It builds upon existing department and agency analysis and assessment processes as well as relevant outside research. [...] From the conflict analysis, the Strategic Assessment should then identify the key factors that need to be addressed as priorities in the near term and state these as priority objectives for an integrated effort by the UN system. [...] These key conflict factors are then transformed into priority objectives." Some of the conflict factors include: "Political and social inequality in access to economic and social rights fuels grievances and conflict" and "Massive population displacement preventing economic recovery and creating new causes of conflict" – which translates to the priority objective to: "Establish inclusive system of government; provide population with equal access to services and entitlements" and to "Protection, resettlement and reintegration of displaced populations in secure areas of return" respectively. [...] Annex C: Conflict Analysis Methodologies: Conflict Analysis Framework for Natural Resources and the Environment (UNEP). http://postconflict.unep.ch/publications/CAF_draft_jan_09.pdf "

UN Policy for Post-Conflict Employment Creation, Income Generation and Reintegration (2009):²⁸³ "[...] Challenges to employment in post-conflict settings: Promoting employment growth requires a thorough understanding of the underlying economy and market. An immediate challenge is to restore markets and access to markets for goods, services and labour affected by the conflict. Sustaining reintegration of ex-combatants, (including former child combatants), refugees and internally displaced persons (IDPs) should involve continuous monitoring to avoid undermining or reversing early achievements from the stabilization phase. [...] The characteristics of basic labour markets, the levels of organization and training of labour, and the potential for employment programmes to generate desired results, all differ significantly between rural and urban areas. Root causes of conflict, such as inequitable access to land and natural resources, need to be addressed. [...] Bearing in mind that many conflict-affected groups are from rural areas, policies and programmes should have a balanced rural-urban emphasis. Only thus can over-migration of conflict-affected groups into urban areas be avoided. Policies should focus on regional development, building on existing natural resources and regional economic potential. Sectoral programmes aimed at new agricultural products and increased productivity for existing agriculture can help achieve this balance. [...]"

Environmental Policy for UN Field Missions (2009):²⁸⁴ “The purpose of this document is to provide policy for the Department of Peacekeeping Operations (DPKO), the Department of Field Support (DFS) and field missions on environmental matters and its implementation in field missions. The policy requires that each field mission establishes its environmental policy and objectives and control measures which are to be implemented through all phases of the mission. Their implementation is the responsibility of the Head of Mission. All personnel shall conduct themselves in accordance with this document as well as with the DPKO/DFS Environmental guidelines and any associated objectives, instructions and operating procedures issued. This policy was developed to fulfill a need for minimum standards for missions on environmental issues. The policy and its associated guidelines were developed through cooperation between the United Nations Environment Programme (UNEP) and DPKO. [...] In the past, environmental issues were handled on an ad-hoc basis by individual missions relying upon their own assessments of any problems and, often, the voluntary actions of mission personnel. The issuance of this policy and the associated guidelines for field missions is required to practice internationally acceptable standards. [...] Each United Nations field mission will take actions to integrate environmental measures into its planning and operations in order to avoid and minimize the impact of activities carried out by the mission and its staff on the environment and to protect human health from such environmental impact.”

Environmental Guidelines for UN Field Missions – Draft (2010):²⁸⁵ “[...] These Guidelines provide guidance on environmental issues to be implemented by field missions of the United Nations supported by the Department of Peacekeeping Operations (DPKO) and the Department of Field Support. They are to be read in conjunction with the DPKO/DFS Environmental Policy issued separately. [...] These Guidelines provide basic information on most environmental issues likely to be faced by field missions. It includes details on specific environmental matters and some procedures for implementing the environmental policy. The guidelines provide the basis for missions to establish mission specific baseline studies, environmental action plans and Standard Operating Procedures (SOPs) as necessary. It highlights the major aspects of each specific area and provides general recommendations on how to manage each area. It is not intended to provide in-depth technical details. Additional information and details in a particular area will need to be obtained by reviewing the references and/or undertaking additional research. [...] The United Nations is a forum for establishing international agreements and practices on environmental issues. Field missions are not exempt from these practices. Due to their special position in the host country, field missions should lead by example in taking specific actions to demonstrate environmental awareness, sustainability management, recycling, and hazard and waste control.”

IMPP Guidelines: Role of the Field – Integrated Planned for UN Field Presences (2010):²⁸⁶ “[...] Missions and UNCTs vary, so the composition of integrated field coordination structures will be context-specific. Composition should ensure adequate coverage of the priorities identified in an integrated strategic framework and should also take into consideration the capacity of mission components and agencies to participate. [...] Each thematic working group is responsible for consulting relevant government officials as per their usual planning or programme development process. Functional (resource mobilization, management, communications, monitoring and evaluation, programming, contingency planning) or crosscutting (gender, human rights, HIV/AIDS, natural resources) thematic groups may also be convened on an ad hoc or standing basis. [...] Annex 9: Strategic Assessment Methodology [...] The analysis should aim at identifying the factors most salient for addressing the conflict through a multi-dimensional UN strategy. The following is an example list of factors: unequal access to resources, poor governance, inter-ethnic strife, separatist ambitions, rising food insecurity, lack of national strategies, incomplete reintegration of ex-combatants, displacement, inconclusive elections, gender inequalities in accessing resources, high levels of sexual and gender-based violence including when perpetrated as a warfare tactic. The analysis of these factors should include the rights of individuals and obligations of authorities based on the applicable international human rights standard; [...]”

Operational Guide to the Integrated Disarmament, Demobilization and Reintegration Standards (2010):²⁸⁷ “The objective of the DDR process is to contribute to security and stability in post-conflict environments so that recovery and development can begin. The disarmament, demobilization and reintegration of combatants together make up a complex process with political, military, security, humanitarian and socio-economic dimensions. This process aims to deal with the post-conflict security problem that arises when combatants are left without livelihoods and support networks during the vital period stretching from conflict to peace, recovery and development. DDR also helps build national capacity to assist in the reintegration of ex-combatants and to support communities receiving ex-combatants and working for their peaceful and sustainable reintegration. Through a process of comprehensively disarming combatants, preparing them for civilian life and providing them with opportunities for sustainable social and economic reintegration, DDR aims to support this high-risk group so that they become stakeholders in the peace process. [...] When considering areas of return and resettlement during the Reintegration phase, “an assessment should be made of the economic and social potential of the areas of expected return or resettlement. This assessment should take into account the availability of natural resources, the economic infrastructure (such as access to markets and availability of community services) and the security situation. It should also map local services and institutions; anything on mediation.”

Second generation disarmament, demobilisation and reintegration practices in peace operations (2011):²⁸⁸ “Considerable challenges have undermined traditional DDR in the past and constitute potential significant obstacles for Second Generation DDR, including lack of political will, the link between DDR and security sector reform, poorly regulated natural resources, illicit drugs and organized crime as well as economic insecurity. [...] The report further explores critical issues that should be considered in designing Second Generation DDR options, including national and UN strategic frameworks and mission exit strategies, monitoring and evaluation, regional issues, natural resources and sustainable DDR, as well as environmental factors.”

UNDG Guidance note on natural resources and land in transition settings (2012):²⁸⁹ “[...] The aim of this note is to provide practical guidance that could be used to consider natural resource and land issues in the various transitional analysis and planning frameworks including: the Common Humanitarian Action Plan (CHAP), Post Conflict Needs Assessment (PCNA), Integrated Mission Planning Process (IMPP), Integrated Peacebuilding Strategies, the UN Common Country Analysis (CCA) and the UN Development Assistance Framework (UNDAF). This synthesis note provides guidance to UNCTs and Missions on incorporating and implementing natural resource and land management principles into the ongoing work in their transitional settings. [...] Managing natural resources and land using conflict-sensitive approaches is important for preventing violence. A natural resource or land management system is conflict-sensitive if the power to make decisions about vital resources can be contested by different stakeholders without violence. This, in turn, requires a government that is capable, accountable, transparent and responsive to the wishes and needs of its population. It also requires a civil society that is ready and able to engage with government to manage natural resources and land in a sustainable, profitable, equitable and non-violent manner. External actors, such as the United Nations (UN) can help build the capacity of conflict-affected countries and fragile societies to understand, manage, mediate and respond to natural resource and land conflicts without violence, but the process must be led from within. The challenge for the UN is to promote positive social transformation using natural assets while mitigating the risks and potential impacts of violent and damaging conflict.”

Conflict analysis and peacebuilding toolkit on natural resources and land (2012):²⁹⁰ “[...] This Conflict Analysis and Peacebuilding Toolkit (CAPT) for natural resources and land has been designed as a field level toolkit to accomplish two main tasks. First, to help practitioners diagnose the main linkages and impacts among natural resources, land and violent conflict. Second, to help identify, prioritize, sequence and monitor natural resource and land interventions that can support peacebuilding and post-conflict transitions. The natural resources that are addressed by this toolkit are divided into three broad categories: extractive natural resources (such as oil, gas, gold, and diamonds), renewable resources (such as water, timber, and fisheries), and land. [...] The CAPT is intended to be used as a diagnostic and programming tool that can support the design and implementation of any needs assessment, planning or programming framework conducted in a post-conflict context. These include, but are not limited to, a conflict analysis, a Post-Conflict Needs Assessment (PCNA), an Integrated Mission Planning Process (IMPP), a Poverty Reduction Strategy Paper (PRSP), a UN Development Assistance Framework (UNDAF), a Post-Conflict Environmental Assessment (PCEA) or a peacebuilding strategy. Donor agencies, non-government organizations and national actors can also use the CAPT to inform their own peacebuilding plans, policies and priorities.”

5. Decisions of the UNEP Governing Council

22/1/IV (2005): Post-conflict environmental assessments:²⁹¹ “Commends the role that the United Nations Environment Programme has played in undertaking post-conflict assessments, including its role in promoting clean-up of environmental hotspots, in supporting the environmental activities of Governments in post-conflict situations, in raising awareness of conflict-related environmental risks, and in integrating post-conflict environmental activities as part of the United Nations humanitarian assistance and part of the reconstruction efforts to countries and regions [...] Requests the Executive Director to further strengthen the ability of the United Nations Environment Programme to assess environmental impacts in post-conflict situations [...] Requests the Executive Director to make the necessary arrangements in order to enable the United Nations Environment Programme to conduct post-conflict environmental assessment at the request of the concerned State or States to be assessed as well as to report to the relevant United Nations bodies and commissions for further follow-up.”

Adoption of the United Nations Environment Programme: Medium-term Strategy 2010-2013:²⁹² “In order to secure the environmental conditions for prosperity, stability and equity, the United Nations systems needs to respond to current challenges in a manner that is commensurate with their scale and the nature of the opportunities. As the environmental programme of the United Nations, UNEP is mandated to serve as a lead authority in articulating, facilitating and supporting a response to these environmental challenges and opportunities. [...] UNEP will play a leadership role in building national capacity to minimize threats to human well-being arising from the environmental causes and consequences of conflicts and disasters. The desire for greater coherence in the United Nations system and the Bali Strategic Plan offer an important opportunity to play this role and to develop an integrated approach to disasters and conflicts, spanning the key pillars of vulnerabilities and risk reduction, emergency response and recovery, and peacebuilding. This will contribute to achieving the Millennium Development Goals and the Hyogo Framework for Action 2005–2015. Within these pillars, UNEP will emphasize the importance of addressing environmental risks and vulnerabilities as a prerequisite to sustainable development. UNEP will seek to integrate environmental management needs within recovery plans and peacebuilding strategies of the relevant United Nations actors including the United Nations country teams, the United Nations Development Group and the Peacebuilding Commission. [...] Enhanced implementation will be pursued through a number of processes and partnerships, including: Strengthening the regional presence of UNEP and enhancing the role of regional offices to facilitate UNEP-wide integrated support to countries; Increasing UNEP involvement in the United Nations Development Group and endeavouring to strengthen the environmental sustainability component of the United Nations Development Assistance Framework process, post-conflict needs assessments, post-disaster needs assessments, and engagement with United Nations operations more broadly, including through developing tools and training on environmental sustainability for other United Nations entities.”

Annex 3

Acronyms

ACC	Afghanistan Conservative Corps
AMIS	African Union Mission in Sudan
AMISOM	African Union Mission in Somalia
AU	African Union
CEB	Camp Eagle Base
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CMSRRD	Commission for the Management of Strategic Resources, Reconstruction and Development
CNDP	National Congress for the Defence of the People
CO ₂	Carbon Dioxide
DDR	Disarmament, Demobilization and Reintegration
DESA	United Nations Department of Economic and Social Affairs
DFS	United Nations Department of Field Support
DPA	United Nations Department of Political Affairs
DPKO	United Nations Department of Peacekeeping Operations
DRC	Democratic Republic of the Congo
EBS	Environmental Baseline Study
EHSA	Environmental Health Site Assessment
EIA	Environmental Impact Assessment
EITI	Extractive Industries Transparency Initiative
EUFOR	European Union Force
FAO	Food and Agriculture Organization of the United Nations
FARDC	Armed Forces of the Democratic Republic of the Congo
FLEGT	Forest Law Enforcement, Governance and Trade
FOI	Swedish Defence Research Agency
FRMC	Forest Reform Monitoring Committee
GEMAP	Governance and Economic Management Assistance Program
GFSS	Global Field Support Strategy
GIS	Geographic Information System
ICTS	Information and Communication Technology Service
IDDRS	Integrated Disarmament, Demobilisation, and Reintegration standards
IDP	Internally displaced persons
IISD	International Institute for Sustainable Development
ILO	International Labour Organization
IMPP	Integrated Mission Planning Process
INGO	International non-governmental organization
IPIS	International Peace Information Service
ISAF	International Security Assistance Force
ITRI	International Tin Research Institute
iTSCi	ITRI Tin Supply Chain Initiative
JMAC	Joint Mission Analysis Centres
kVA	Kilovolt-ampere
KPCS	Kimberley Process Certification Scheme
LURD	Liberians United for Reconciliation and Democracy
MINURCAT	United Nations Mission in the Central African Republic of Chad

Acronyms

MINURSO	United Nations Mission for the Referendum in Western Sahara
MINUSTAH	United Nations Stabilization Mission in Haiti
MONUA	United Nations Observer Mission in Angola
MONUC	United Nations Mission in the Democratic Republic of the Congo
MONUSCO	United Nations Organization Stabilization Mission in the Democratic Republic of the Congo
NATO	North Atlantic Treaty Organization
OECD	Organization for Economic Cooperation and Development
OIOS	Office of International Oversight Services
PBSO	Peacebuilding Support Office
PRIO	Peace Research Institute Oslo
QIP	Quick Impact Project
RESPECT	Recovery, Employment and Stability Programme for Ex-combatants and Communities in Timor Leste
RPTF	Rubber Plantation Task Force
RUF	Revolutionary United Front
SAESSCAM	Small-scale mining technical assistance and training service
SEC	Securities and Exchange Commission
SSR	Security sector reform
UN	United Nations
UNAMA	United Nations Assistance Mission to Afghanistan
UNAMIC	United Nations Advance Mission in Cambodia
UNAMID	United Nations-African Union Hybrid Mission in Darfur
UNAMSIL	United Nations Mission in Sierra Leone
UNAVEM	United Nations Angola Verification Mission
UNCT	United Nations Country Team
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UNIFIL	United Nations Mission in Lebanon
UNIKOM	United Nations Iraq-Kuwait Observation Mission
UNISFA	United Nations Interim Security Force for Abyei
UNITA	National Union for the Total Independence of Angola
UNITAC	United Nation Information, Training and Analysis Centre
UNITAR	United Nations Institute for Training and Research
UNLB	United Nations Logistics Base (Brindisi, Italy)
UNMEE	United Nations Mission in Ethiopia and Eritrea
UNMIBH	United Nations Mission in Bosnia Herzegovina
UNMIL	United Nations Mission in Liberia
UNMIS	United Nations Mission in Sudan
UNMISS	United Nations Mission in South Sudan
UNMIT	United Nations Mission in Timor-Leste
UNPROFOR	United Nations Protection Force
UNOCI	United Nations Mission in Côte d'Ivoire
UNOMIL	United Nations Observer Mission in Liberia
UNOPS	United Nations Office of Project Services
UNSOA	United Nations Support Office for AMISOM
UNTAC	United Nations Transitional Authority in Cambodia
UNTAET	United Nations Transitional Administration in East Timor
USAEPI	United States Army Environmental Policy Institute
USAID	United States Agency for International Development
US EPA	United States Environment Protection Agency
VHF	Very high frequency
VOC	Volatile organic compounds
VPA	Voluntary Partnership Agreement
WFP	United Nations World Food Programme

Annex 4

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Mission-level Review

Africa Union – United Nations Hybrid Operation in Darfur (UNAMID)
United Nations Mission for the Referendum in Western Sahara (MINURSO)
United Nations Stabilization Mission in Haiti (MINUSTAH)
United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO)
United Nations Interim Force in Lebanon (UNIFIL)
United Nations Logistics Base (UNLB)
United Nations Mission in Liberia (UNMIL)
United Nations Mission in Sudan (UNMIS)
United Nations Integrated Mission in Timor-Leste (UNMIT)
United Nations Support Office for AMISOM (UNSOA)

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Annex 5

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“Since the declaration, ten years ago, of the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict, the UN family has made important progress in understanding the complex relationship between war and the environment, and the role that natural resources play in fuelling and financing instability and violence.

From Sierra Leone to Timor-Leste, countries have been helped to mitigate the environmental risks to building peace and to harness the economic potential of using their natural resources sustainably. However, there is still major cause for concern. The environment continues to be among the casualties of warfare. At the same time, the demand for natural resources continues to grow to meet the needs of a rising global population. Fragile nations, including post-conflict countries, could face significant resource competition in the coming decades. This will only be exacerbated by the predicted consequences of climate change on water availability, food security, sea-level rise and population distribution.

Strengthening national capacity for transparent, equitable and sustainable management of natural resources will continue to be an important part of peace-keeping and peacebuilding, as well as our overall development support to Member States. Given their critical role in supporting countries emerging from conflict, United Nations peacekeeping operations are well-placed to positively influence how the environment is protected and natural resources are managed. This can start with minimizing the environmental footprint of our own operations.

As we mark this International Day, let us recognize the wide-ranging and long-term consequences of damaging the environment – both in peace and times of war. And let us reaffirm our commitment to the sustainable management of natural resources as a critical element of durable peace and security.”

Message of the UN Secretary-General, Ban Ki-moon
on the International Day for Preventing the Exploitation of the Environment in War and Armed Conflict
6 November 2011

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