THE TRAMPLED GRASS

Mitigating the impacts of armed conflict on the environment

James Shambaugh
Judy Oglethorpe
Rebecca Ham
with contributions from Sylvia Tognetti

Biodiversity Support Program

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Dedication

This publication is dedicated to all those who lost their lives in the cause of conservation during times of civil strife

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Acronyms and Abbreviations

ACE	Armed Conflict and the Environment Project
ACTS	African Centre for Technology Studies
AIDS	Acquired Immune Deficiency Syndrome
AWF	African Wildlife Foundation
BSP	Biodiversity Support Program
CAMPFIRE	Communal Areas Management Programme for Indigenous Resources (Zimbabwe)
CAR	Central African Republic
CARPE	Central African Regional Program for the Environment
CBNRM	Community-based natural resource management
CBO	Community-based organization
CI	Conservation International
CITES	Convention on International Trade in Endangered Species
CMR	Conflict Prevention, Mitigation, Resolution/Reconciliation Division (USAID)
CoCoSi	Comité de Coordination de Site
DRC	Democratic Republic of Congo
EIA	Environmental impact assessment
ESRI	Environmental Systems Research Institute
EWCO	Ethiopian Wildlife Conservation Organization
FFI	Fauna and Flora International
FRELIMO	Frente de Libertação de Moçambique (Mozambique Liberation Front)
GEF	Global Environment Facility
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Development Aid)
HQ	Headquarters
ICCN	Institut Congolais pour la Conservation de la Nature (Congolese Institute for the Conservation of Nature)
IDP	Internally displaced person
IGCP	International Gorilla Conservation Programme
IRDNC	Integrated Rural Development and Nature Conservation
IUCN	World Conservation Union
MOU	Memorandum of understanding
NC–IUCN	Netherlands Committee–IUCN
NGO	Non-governmental organization

NP	National park
NRM	Natural resource management
OCHA	Office for the Coordination of Humanitarian Affairs
OFDA	Office of Foreign Disaster Assistance
ORTPN	Office Rwandais du Tourisme et Parcs Nationaux (Rwanda Department of Tourism and National Parks)
RBM	Ranger-Based Monitoring
REA	Rapid environmental assessment
RENAMO	Resistência Nacional Moçambicana (Mozambican National Resistance)
SIDA	Swedish International Development Agency
SIPRI	Stockholm International Peace Research Institute
SPLA	Sudan People's Liberation Army
TNC	The Nature Conservancy
TRP	Tropical Rainforest Programme
UN	United Nations
UNEP–WCMC	United Nations Environment Programme–World Conservation Monitoring Centre
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNF	United Nations Foundation
UNHCR	United Nations High Commissioner for Refugees
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
UWA	Uganda Wildlife Authority
WCS	Wildlife Conservation Society
WRI	World Resources Institute
WWF	World Wide Fund for Nature; in the USA and Canada: World Wildlife Fund
WWF–EARPO	Worldwide Fund for Nature–Eastern Africa Regional Programme Office

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Preface

When elephants fight, the grass gets trampled.

This old African proverb is highly relevant to the armed conflicts[1] that unfortunately are all too prevalent in Africa today. It is often not the politicians and elites who suffer the adverse consequences of armed conflicts, but the common people and the environment. Conflict brings untold direct suffering, and the impacts it wreaks on the environment bring even more suffering.

This guide grew out of a project established in 1998 in the Biodiversity Support Program (BSP) by Judy Oglethorpe after she saw the devastating environmental effects of the recent war in Mozambique. The project on Armed Conflict and the Environment aimed to identify and raise awareness about the negative impacts of armed conflict on the environment, and to promote strategies for mitigating impacts where possible before, during, and after conflict. It ran from 1998 to 2001, and was managed successively by Rebecca Ham and James Shambaugh.

The project investigated impacts of conflict and post-conflict in many parts of sub-Saharan Africa in order to highlight and better understand the challenges for conservation and natural resource management in areas affected by armed conflict. During its investigations, while consulting with many sources and collaborating with many partners, the project undertook a literature review, carried out case studies, and analyzed and communicated its findings and the lessons learned. The scope of the project was limited to mitigation of the negative impacts of armed conflict. It did not attempt to address the broader issue of how environmental degradation and resource depletion in themselves may induce conflict, although we recognize the importance of that issue.

In addition, this project did not address circumstances where conflicts reduce pressure on habitats and slow or stop resource exploitation and loss of biodiversity, as documented by McNeely (2000) and others. We acknowledge such circumstances. But these circumstances are often short-term; in many cases, they are outweighed and even overwhelmed in the long run by the enormous negative impacts of war on the environment, the broader economy, and society as a whole (Dudley *et al.*, in press). Throughout this guide, any references to "environmental impacts" refer to negative environmental impacts, unless otherwise indicated.

1. The word *conflict* may be used to refer to a physical confrontation such as a fight, battle, or struggle, or used more broadly to mean a disagreement or opposition of interests or ideas. In this guide, *armed conflict* is used synonymously with *warfare, war, civil conflict,* and *violent conflict* in which at least 1,000 deaths have resulted (Stockholm International Peace Research Institute [SIPRI] 2001).

Why this guide?

In times of conflict, some environmental impacts are unavoidable. However, other impacts may be reduced or even prevented if the right actions are taken in the right places and at the right times. With the proper approach, action can be taken even under extremely difficult and abnormal circumstances.

People working in the natural resource and conservation sectors who are overtaken by armed conflict often find themselves in frightening situations well outside their normal experience. They may be in physical peril, and they often must work in great isolation. This guide aims to share some of the experiences and lessons that have emerged from the experiences of many people who have endured a wide range of conflicts in Africa. What we have learned from them, we hope, will prove useful to those who unfortunately find themselves in conflict situations.

This guide addresses the efforts and experiences of people in many different sectors, but remains grounded in the conservation and natural resources perspective. It stresses the importance of dealing with short-term issues while still keeping sight of longer-term goals. It also recognizes the critical need to save lives today, while ensuring that the environment and resource base upon which those same people depend will still be there to support their livelihoods long after the crisis has passed.

Who is this guide for?

The strategies presented in this guide are primarily for conservation and natural resource management practitioners and policy makers, and the donor community that supports them. However, some of these findings are also relevant for the relief community, development organizations, local communities, and others with a stake in mitigating the environmental impacts of armed conflict. Throughout the guide, we attempt to highlight and direct attention toward those sections that are of particular interest to certain sectors.

Conservation community: practitioners and decision makers; NGOs, government, and donor sectors

Whether working in the field or from afar, members of the conservation community can play an essential role in raising awareness of the importance of environmental concerns in times of armed conflict, and taking actions to continue conservation efforts as much as possible. There are many lessons for policy makers. Funding is often a problem at this time, and the section on funding addresses this and suggests some possible solutions. This guide also covers the importance of collaborating with other sectors.

Relief community

During the emergency phase of armed conflicts, the relief community usually intervenes, often on a large scale. Since its primary mission is to save lives and reduce human suffering, its relief

interventions often do not prioritize the environment, and sometimes damage it. In recent years, however, a number of relief organizations have begun developing protocols and guidelines to reduce the environmental impacts of their activities, both during emergencies as well as in the rehabilitation and recovery phases. This guide builds on these efforts and encourages sectors to collaborate so environmental protocols may be implemented more effectively. Relief practitioners will be particularly interested in the "Collaboration" section of this guide.

Development community and local partners

A number of development organizations have a long-standing practice of integrating environmental concerns into their programs through a variety of activities, many of which involve local communities. In some instances, the development community has also worked closely with the relief sector, and thus can play an intermediary role in bringing the relief and conservation sectors closer together in the field. It is important to realize that the development community takes over where the relief sector leaves off, making it critical that these two sectors collaborate and provide continuity for the local people affected by armed conflict.

The participation of local communities is also very important. Natural resource management initiatives developed in collaboration with local communities and based on local needs are often more likely to endure during periods of armed conflict because the community has a vested interest in them.

How to use this guide

This guide is organized into three main sections:

- **Introduction: armed conflict and the environment**
  This section provides background information, briefly describing the changing nature and impacts of armed conflict in Africa today, highlighting the importance of understanding the broader political, social, and economic context, and setting the stage for developing appropriate response strategies.

- **What can be done?**
  This section—the bulk of the guide—outlines a variety of practical assessment and response strategies for conservation practitioners and other stakeholders at all levels to improve conservation effectiveness before, during, and following conflict.

- **Conclusions and the way forward**
  This section summarizes the main conclusions and outlines priorities for future activities dealing with this issue.

This guide is written for a broad audience and draws from experiences in a wide range of conflict situations. We encourage you to browse through it, reviewing parts that are appropriate to

your circumstances. Take from it ideas that are relevant, and think through whether they are useful for your situation.

A word of caution: It is important to remember that this guide provides ideas for possible action, rather than guidelines to follow strictly. No two situations are the same. There are no blueprints, and not all the strategies described here will be appropriate in every case. Good judgment, based on sound understanding of the circumstances, is needed to decide what approach is best in a particular situation. The actions you choose will depend on the political, geographical, and cultural context and on the kind of conflict, and even the phase of conflict, you find yourself in. Be flexible, and act with a good understanding of the situation.

Note that this guide uses the term *conservation* in a broad context, intending to encompass natural resource management, biodiversity conservation, and protected area management.

Final note

The challenges for organizations working in areas of armed conflict are considerable, and there is much work to be done. We hope that this guide will be useful. As new ideas and approaches emerge, we hope you will supplement what is presented here and share what you learn with others. We wish you well in your endeavors.

James Shambaugh
Judy Oglethorpe
Rebecca Ham

Washington, DC
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Executive Summary

Armed conflicts create complex challenges for conservation in many areas of sub-Saharan Africa. War devastates the lives of those in its destructive path, including civilians, local people, and, sometimes, conservation workers. In many areas, war has radically altered economic, political, and social conditions, with profound impacts on the environment, natural resources, and biodiversity. Despite these circumstances, however, experience has shown that often there are actions that can be taken to mitigate the impacts of armed conflict on the environment.

This publication is based on the results of the Biodiversity Support Program's Armed Conflict and the Environment (ACE) Project, which reviewed negative impacts of armed conflict on the environment in Africa and analyzed a wide range of practical experiences in reducing these impacts before, during, and after conflict. Chapter 1 summarizes environmental impacts of habitat destruction and loss of wildlife; over-exploitation of natural resources; and pollution. It then reviews impacts on conservation organizations and broader consequences related to political, social, and economic aspects.

Chapter 2 covers practical actions that can be taken by the conservation sector and others to reduce impacts. No blueprint exists for what to do in conflict situations, since circumstances vary widely. However, by drawing on a wide range of experiences in different parts of Africa, a number of general principles and recommendations that can help to guide the development of appropriate strategies to prevent or mitigate the impacts of armed conflict on the environment have been identified. Broadly, these principles fall under the headings of organizational response, collaboration, and issues of funding and finance.

The recommendations in this guide aim to help natural resource managers, conservation practitioners, policy makers, and donors better prepare for conflicts before they occur, cope with them while they are occurring, and recover from them after they are over. The prospective readers of this guide may work in government, non-governmental organizations (NGOs), donor organizations, or academia. While the recommendations are targeted mainly at the conservation community, they will also be helpful for practitioners and policy makers from the relief and development sectors, and others who live and work in areas affected by armed conflict. Main recommendations are summarized below, along with conclusions and future steps from Chapter 3.

Look for new approaches to achieve long-term conservation goals, and enhance linkages between sustainable livelihoods and the environment

During conflict, local people often become more dependent on natural resources. The conservation community can help people meet their needs in a way that puts the least strain on these resources, so that longer-term livelihoods are less threatened. Similarly, while saving lives is the first priority during humanitarian emergencies, keep in mind that there are many actions that can be taken to reduce environmental impacts. The conservation sector can play an important role here, while still maintaining its long-term goals.

Be aware of risks to natural resources and opportunities for conservation action during transition times and post-war reconstruction

During and immediately following armed conflict, the environment is often especially vulnerable, not least because it often falls low on the agenda of those in power. At the same time, controls over natural resources are often poor. Resources may be grabbed illegally and fed into new illegal trade networks, sometimes to purchase arms. Moreover, post-war governments often turn to resources such as minerals or timber to restart the economy. The transition and reconstruction period is the time when short-term needs must be reconciled with longer-term sustainable practices. Ultimately, if long-term rural livelihood needs cannot be met because the natural resource base is depleted and ecological systems are damaged, there is a high risk of instability and a return to armed conflict. The conservation community can play an important role in influencing decisions at this time. It can also participate in post-war policy reforms to ensure that adequate environmental considerations are incorporated into the policies of other sectors.

Be flexible and adaptable, while keeping long-term goals in sight

Conditions can change quickly during conflict, and organizations need to develop new and flexible strategies to keep functioning effectively. There are no blueprints to follow. During wartime, it is important to assess the situation continuously, to adapt to new circumstances, and always to watch for windows of opportunity for action as they open.

Maintain a presence and strengthen capacity to cope with the conflict situation

Whenever possible, the conservation sector should continue to operate and maintain a presence in the field. Staff security is a prime consideration; it may become necessary to evacuate all field workers. However, experience has shown that when it is feasible to stay, a continued presence

makes a big difference to achieving conservation, even if the ongoing war severely limits conservation activities. If sites have to be abandoned, it is often possible to maintain a long-term commitment from another location. Pulling out completely puts existing investments in an area at risk and removes the capacity to respond swiftly at critical moments. Staying on enables organizations to maintain their capacity, sustain relationships and the respect of partners, build partners' capacity, and provide technical support. Conservationists able to stay in place remain poised to act at critical moments such as transition times, when the greatest damage to the environment often occurs. They can also play an important role in supporting and influencing post-war reconstruction and policy reform.

Recommendations cover the need for good personnel management (keeping staff safe, paid, and content), for good communication (both procedurally and materially), and for sound training (both for times of conflict and the return of peace). The need for neutrality is also outlined, though it can be controversial and difficult to achieve.

Ensure sound planning based on reliable information

It is very important to keep up-to-date on the conflict, its causes, changing circumstances, and likely developments and impacts. Workers who are aware of evolving threats and opportunities will be able to gauge the best ways the organization may respond. Contingency plans that address the periods before, during, and after conflict should be developed, so that the organization is ready to respond quickly when opportunities for action arise. Planning should cover security strategies.

Look for opportunities to collaborate in order to improve effectiveness

Inter- and intra-sectoral collaboration is often more important in times of conflict than during peacetime, and is one important way to mitigate impacts of armed conflict on the environment. In wartime, it is important to collaborate with a broader set of stakeholders, both inside the environment sector and in other sectors, such as relief, development, and planning. This broader collaboration can increase options by establishing a basis of common concern, increasing trust, and improving communication, and by exchanging information and expertise. This guide highlights some of the challenges of and opportunities for collaboration during times of conflict.

Try to maintain a sound funding base during and after conflict

Very often when crises loom, donors withdraw their funding. This guide presents possible courses of action for donors and conservation practitioners to consider when making decisions in times of great uncertainty. Rather than withdrawing their funds, donors may be able to review their practices and adapt to the situation. At the same time, conservation practitioners should

regard the threat of impending conflict as a warning, and begin developing new fundraising strategies—among them, broadening their funding base. Recommendations are also given on practical financial management during conflict.

Recommendations for future priorities

The analysis presented in this publication took place at a time when learning about the impacts of conflict and possible mitigating measures was rapidly increasing. These findings should be treated as a stepping-stone along the conservation community's path toward better responses in conflict situations. There is still much to learn and act on. In the future, the conservation community should:

- Continue existing analysis of environmental impacts, and expand analysis to include social, economic, legal, policy, and political aspects
- Compile databases of existing environmental information, including information that can be used as a baseline
- Continue to research the relationship between environmental degradation and conflict
- Share information, results, and lessons, and network across sectors
- Promote consumer awareness and responsible behavior
- Develop conservation sector security guidelines
- Reinforce and strengthen national and international capacities to mitigate impacts
- Build local capacity for applied research and monitoring
- Adapt and use existing in-country capacity
- Apply rapid environmental assessment methodology
- Improve ability to anticipate impacts
- Explore international legal mechanisms for redressing impacts.

CHAPTER
1

Introduction: armed conflict and the environment

1 Introduction: armed conflict and the environment

Safeguarding the environment is one of the foundations of peace and security.

Kofi Annan, Secretary-General of the United Nations (UNHCR 2001)

Armed conflict is a very serious problem in parts of Africa today, where many countries are at risk of conflict, engaged in conflict, emerging from conflict, or in a long-term recovery phase. These conflicts are devastating. They cause untold suffering and enormous loss of human life; they fragment societies and shatter economies. They also wreak devastating harm on the environment, biodiversity, and the natural resources upon which people depend—impacts that are suffered long after hostilities end.

When a conflict or crisis hits, the immediate priority is to save lives and minimize human suffering. The focus is on immediate, short-term, human-centered needs. Environmental concerns are relegated to secondary importance. But, although it may seem that environmental concerns should remain a low priority during wars and human crises, the high degree of dependency on natural resources of most communities in Africa and in many parts of the developing world makes it essential that the environment remain a high priority. A degraded environment puts people's future livelihood security at risk, setting the stage for further political instability and conflict.

This introduction begins with an overview of the nature of armed conflicts in Africa today, continues with a brief description of their environmental impacts and consequences, and concludes with a short analysis of the political, social, and economic aspects of these conflicts.

1.1 The changing face of modern warfare

During the twentieth century the number of wars taking place worldwide increased. Since the end of World War II, more than 160 wars have been recorded (McNeely 2000). Although this upward trend in conflict may be inflated by the increasing number of independent countries (Gurr *et al.* 2000), armed conflict remains a critical concern in many parts of the world.

It is of particular concern in Africa, which has experienced more than 30 wars since 1970 alone (Myers 1996). Some of these wars—including those in Ethiopia, Sudan, Chad, Angola, and Mozambique—have been prolonged. Africa has also seen more than 200 coups or attempted coups since 1950 (Renner 1999). As of late 2000, 18 countries in sub-Saharan Africa were either experiencing ongoing or sporadic conflict, or were in a tenuous recovery phase (Gurr *et al.* 2000).

Most conflicts today share a few common characteristics. First, the majority of conflicts are fought within national borders, rather than between different nation-states (McNeely 2000). Indeed, of the 25 major armed conflicts taking place in 2000, all but two were internal (Stockholm International Peace Research Institute [SIPRI] 2001). In Africa, only six of the 103 armed conflicts fought between 1989 and 1997 were fought between countries (Renner 1999). It should be noted, however, that the majority of internal conflicts do not in fact remain confined within the borders of a single country (SIPRI 2001), but eventually affect neighboring countries in some way.

"Most of the conflicts reviewed (in 2000) are difficult to resolve. Contemporary rebel movements tend to break apart into factions, all sides have access to income and weapons, the fighting takes place in remote locations, and the belligerents perceive their vital interests to be at stake. Peace is difficult to achieve when combatants have the will and capacity to continue to fight." (SIPRI 2001)

Second, most of these conflicts are unstructured and difficult to predict. They are often fought by multiple actors with interdependent interests, and the distinction between combatants and civilians is often blurred. Actors in these wars frequently target civilians, including women and children, as tragically witnessed in such places as Sierra Leone (Reno 2001). In these conflicts, a larger percentage of the population has direct experience of atrocities, as victims, perpetrators, or both (Anderson 1999).

Third, today's conflicts are driven by a variety of motives with a wide range of contributing factors, among them ideology, access to resources, ethnicity, religion, greed, distribution of power among social groups and between countries, weak states, and lack of leadership. Most conflicts in sub-Saharan Africa today are driven by some combination of these factors. Moreover, these conflicts are usually fueled by patronage systems and the hegemonic desire of political elites or military strongmen to control

and exploit valuable natural resources—particularly mineral resources such as gold, oil, and diamonds (Plumptre *et al.* 2001), as well as timber.

War and economic exploitation have always been closely linked. In Africa, however, local elites and transnational corporations increasingly use war as a cover to generate wealth through natural resource extraction (International Famine Centre 2000). Considerable international attention has recently focused on the war economies in such countries as the Democratic Republic of Congo (DRC) (United Nations 2001), Liberia (Global Witness 2001), and Angola (Global Witness 1998 and 1999).

The relationship between these conflicts and their impacts on the environment depends to a large extent on the type, intensity, and duration of the conflict. Conflicts in sub-Saharan Africa range from high intensity and relatively short duration (e.g., Republic of Congo (Brazzaville) and Central African Republic), to low intensity and long duration (Ethiopia, Mozambique, Angola, and Sudan). Even within a single country, the type of conflict may vary, with sometimes two or more distinct phases of conflict (Simon Anstey, pers. comm.). The characteristics of modern African conflicts—complex, unpredictable, and often driven by natural resource extraction—make them particularly damaging to the environment and those who depend on it.

Recognizing the nature of these conflicts is an important first step in understanding their impacts, both on local populations and on the environment that supports them, and in developing mitigation strategies (Anderson 1999). In order to develop such strategies, it is important to first understand the impacts of these conflicts and the consequences they hold both for conservation and for the broader political, social, and economic context.

1.2 Impacts and consequences

The negative impacts of armed conflict on the environment are becoming increasingly well documented in a growing body of literature (e.g., Austin and Bruch 2000; Blom *et al.* 2000; Blom and Yamindou 2001; Ham, in prep.; Hart and Mwinyihali 2001; Hatton *et al.* 2001; Jacobs and Schloeder 2001; Kalpers 2001a, 2001b; Matthew *et al.* 2001; Plumptre *et al.* 2001; Price, in press; Squire 2001). This guide will therefore provide only a brief overview of these impacts, with references indicating where to find additional information.

During and following armed conflict, an armed and lawless society can have both direct and indirect impacts on the environment. These impacts occur for subsistence, strategic, or commercial reasons, and often have political, social, and economic root causes. The main impacts of armed conflict on the environment occur through habitat destruction and loss of wildlife, over-exploitation and degradation of natural resources, and pollution, and each of these categories is described briefly below.

1.2.1 Habitat destruction and impacts on wildlife

Habitat destruction and the accompanying loss of wildlife are among the most common and far-reaching impacts of conflict on the environment, and occur for subsistence, strategic, or commercial reasons. Habitats are sometimes directly affected during armed conflict. For example, vegetation may be cut, burned, or defoliated to improve mobility or visibility for troops. In Rwanda in 1991, the Rwandan army cut a swath 50 to 100 meters wide through the bamboo forest connecting the Virunga Volcanoes in order to reduce the possibility of ambush along a key trail (Kalpers 2001b).

When large numbers of displaced people are temporarily resettled, they often clear away vegetation, to farm and to obtain firewood—practices that swiftly lead to deforestation and erosion. Since refugees and internally displaced people are often located in ecologically marginal and vulnerable areas, the ability of the environment to subsequently recover may be limited. Protected areas may be affected if displaced people settle inside or near them, as occurred in and around Virunga National Park in 1994 (Kalpers 2001a) (see Boxes 1.1 and 1.2). Vegetation may also be destroyed during and immediately following periods of conflict, for example when valuable minerals such as diamonds and gold are extracted, often in the absence of environmental controls (Austin and Bruch 2000).

With habitat destruction, certain plant and animal species may become locally threatened, or even extinct. In Rwanda, two-thirds of the original area of Akagera National Park was removed from protected status, and numerous refugees and their livestock were resettled there. The result was the virtual local extinction of some species of ungulates, including the roan antelope (*Hippotragus equinus*) and the eland (*Taurotragus oryx*) (Kalpers 2001b). Individual animals may also be killed or injured by land mines, as happened to elephants *(Loxodonta africana)* in Mozambique.

Box 1.1 Case Study: Volcanoes under Siege: Impact of a Decade of Armed Conflict in the Virungas

Author: José Kalpers

Key points: This case study examined events that took place between 1990 and 2000 in the Virunga Volcanoes region straddling Rwanda, Uganda, and DRC, and the impacts these events had on the region's biodiversity. Montane forests in three adjacent protected areas in Rwanda, Uganda, and DRC are home to the endangered mountain gorilla *(Gorilla gorilla beringei)*, which ranges freely across the borders of the three countries. This study described and analyzed responses to the crises observed during different phases of this 10-year period, with particular emphasis on the collaboration among the conservation, emergency-response, and development sectors.

To access the complete study, go to: www.BSPonline.org/publications.

Box 1.2 Habitat destruction in Rwanda

In northwestern Rwanda, the Gishwati Forest Reserve was divided up to provide land to returning refugees and, simultaneously, was exploited as pastureland by absentee ranchers. The law enforcement mechanisms that protected this area were not as strong as the survival interests of substantial numbers of refugees or the economic interests of large-scale producers.

Source: Human Rights Watch (2001).

1.2.2 Over-exploitation of natural resources

Over-exploitation of natural resources is often directly linked to armed conflict, and occurs for both subsistence and commercial reasons. One immediate result of political instability during war is that local people often cannot grow basic crops. For their survival, they are increasingly forced to depend on wild foods such as bushmeat and wild food plants. At the same time, displaced people usually collect firewood, food plants, and other natural resources in the areas they have moved to. Such exploitation on a large scale may be unsustainable even in the short term. The situation may be made worse if these people lack local knowledge of optimal resource management practices. When displaced people return to their homelands, moreover, they are often forced to rely heavily on natural resources until they can re-establish their normal livelihoods, including agriculture. In addition, humanitarian organizations themselves often use excessive amounts of local wood for construction (Marion Pratt, pers. comm.). All of these factors can result in resource scarcity or degradation, and may seriously affect long-term livelihoods of the indigenous residents.

In all cases, the breakdown of law enforcement and traditional local controls makes sustainable resource management even more challenging. It is important to understand that incentives for local communities to conserve resources and species decrease when economic benefits from them decline. This is true even in areas that are not directly affected by armed conflict. In Zimbabwe, for example, recent political instability has severely undercut tourism revenues, leading to widespread illegal hunting on certain communal lands where people once benefited from the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) program (Ben Campbell, pers. comm.). Incentives for local communities to conserve natural resources are also far greater in places where they were allowed to participate in the planning and management of protected areas. For example, the survival of Awash National Park in Ethiopia during extended periods of instability is largely attributed to the participation of local communities in the park's management (Jacobs and Schloeder 2001 and Box 1.3). Uncertainty over future access rights encourages unsustainable resource use for short-term gain.

In areas where fighting is occurring, troops often hunt large mammals in great numbers to obtain food. This practice can have a devastating impact on wildlife populations, especially if military action continues in an area for an extended period (Kalpers 2001b). Larger species with slow reproductive rates are particularly vulnerable, and tend to disappear first. In a side effect of the war in Sudan, wildlife in DRC's Garamba National Park, just across the border, was heavily exploited by marauding poachers who killed park animals, primarily for their meat. Patrol monitoring and maps showed the poaching moved steadily south through the park, killing large mammals—initially buffalo *(Syncerus caffer)*, later elephants—from 1991 onward. More than 70 percent of the annual incidents involved Sudan People's Liberation Army (SPLA) "deserters" based on the Sudan side of the border (Hillman Smith and Smith 1997; Hillman Smith *et al.* in press).

When the first war in DRC in 1996-1997 led to the disarming of park guards in Garamba, the poaching escalated for a short time. In that brief period, the elephant population was reduced by half, the buffalo by two-thirds, and the hippo *(Hippopotamus amphibius)* by three-quarters. This latter escalation was not a direct exploitation by the Congolese rebel troops. Rather, it came about because active conservation efforts were blocked, and the general breakdown of law and order was exploited (Hillman Smith and Smith 1997; Hillman Smith *et al.,* in press).

During armed conflict, those in power are often in need of immediate revenue. To fund their military activities, they may turn to commercial-scale extraction of natural resources such as timber, ivory, and diamonds. In some cases, such extraction may be legal, but in other cases those in power may sell extraction rights to which they may have only temporary or in fact no legal rights at all. Large-scale extraction has been documented in the war economies of Liberia and Sierra Leone (Global Witness 2001), Angola (Global Witness 1998 and 1999), and DRC (UN 2001).

Box 1.3 Case Study: Impacts of Conflict on Biodiversity and Protected Areas in Ethiopia

Authors: Michael Jacobs and Catherine Schloeder

Key points: This study looked at the role of Ethiopia's prolonged engagement in various armed conflicts in limiting the effectiveness of the country's conservation and protected-area program. Government institutional politics and adherence to an exclusionary protected-area policy were other key limiting factors addressed by this study. The study assessed the prospects of protecting Ethiopia's remaining biodiversity, as illustrated by the example of Ethiopia's Awash National Park, where community participation in park management played a key role in the park's survival.

To access the complete study, go to: www.BSPonline.org/publications.

Immediately following a conflict, when physical access to natural resource areas opens up again to the general public, private-sector operators often move in and extract resources unsustainably, as occurred in Mozambique (Hatton *et al.* 2001 and Box 1.4) and Liberia (Global Witness 2001). In this phase, peacetime control measures are often still weak or entirely absent. Even when governmental authority is re-established on a firmer footing, governing authorities faced with bankrupt national economies may be forced to kick-start their economies by exploiting renewable resources in an unsustainable way. This requires relatively little long-term investment, compared with the cost of rehabilitating the agriculture and industrial sectors. Finally, if international financial institutions and other creditors demand debt repayment at this time, they may indirectly promote overexploitation of natural resources.

1.2.3 Pollution

Another serious environmental impact of armed conflict is pollution. Pollution can take many forms, and can result directly from actions by military or other armed groups, as well as indirectly from the human and economic crises created by conflict.

In recent conflicts in sub-Saharan Africa, pollution has most often been a serious problem during humanitarian crises. Refugees and internally displaced people often find themselves living in conditions so overcrowded that they become a significant source of potential pollution. In their need to subsist, the displaced may pollute surface water; in their flight, they may bring infectious diseases. The latter concern threatens not just the health of human populations but also that of the indigenous wildlife (Kalpers 2001b). Pollution of rivers and lakes also occurs when human bodies are deposited in them and decompose, as occurred during the Rwanda genocide.

Box 1.4 Case Study: Biodiversity and War: A Case Study from Mozambique

Authors: John Hatton, Mia Couto, and Judy Oglethorpe

Key points: The natural resource base of Mozambique was severely affected by recent armed conflicts. Wildlife resources, especially large mammal species, were decimated inside and outside of protected areas in many parts of the country, and infrastructure in some of the protected areas was destroyed. The immediate post-war period saw largely uncontrolled (and often illegal) harvesting of wildlife and forestry resources that accompanied infrastructure rehabilitation and reconstruction efforts in the absence of adequate enforcement. The management of Mozambique's natural resources and biodiversity is improving in a long-term recovery phase, as better legislation is passed and national institutions gain in strength.

To access the complete study, go to: www.BSPonline.org/publications.

Pollution may sometimes be exacerbated by humanitarian agencies operating in the field during a refugee crisis. Because the primary objective of humanitarian operations is to improve the welfare of refugee or displaced populations, environmental considerations may fall by the wayside. One common consequence is that the facilities and infrastructure in some refugee camps may not meet long-term requirements for protecting the environment (Kalpers 2001b). Poorly placed or badly designed latrines or medical facilities may contaminate water or soil. In some cases, the environmental impacts of these practices do not become apparent until well after the camps are dismantled (Kalpers 2001b).

1.2.4 Consequences for the conservation and natural resource sector

Conservation activities can suffer severe consequences in times of armed conflict. Armed units and local people may target buildings, vehicles, and equipment (Kalpers 2001b, Hillman Smith and Smith 1999). Park headquarters buildings, patrol outposts, field equipment, ranger vehicles, and fuel may all be pillaged or systematically destroyed. This destruction contributes to a general weakening of the organizations, as well as vastly impeding management and surveillance programs in protected areas (Kalpers 2001b).

When the situation grows too unstable, conservation activities may have to stop altogether. Conservation staff may have to abandon their posts and flee. Tragically, some of them may even be killed. When it becomes necessary to abandon an area, senior staff often are the first to go. Senior staffers may have access to project funds or vehicles, and thus may be targeted by thieves. Senior staff may be of an ethnic or religious group targeted by political rivals (Plumptre *et al.* 2001). The evacuation of these senior staff means that relatively inexperienced local or lower-level staff can be left in very difficult situations filling positions of high responsibility for which they have had little or no training (see Box 1.5).

Armed conflicts may also lead to "brain-drain," when nationals with higher education in environmental fields flee the country and do not return. This can leave relatively few well-educated people in the environmental sector, weakening post-conflict attempts at reconstruction and conservation (Plumptre *et al.* 2001).

Faced with such difficult conditions, many conservation organizations withdraw from their field sites when conflicts get under way, often with devastating results for conservation activities. By leaving, organizations lose their ability to protect existing investments, to sustain their capacity, to maintain relationships and the respect of their partners, and to influence the management of natural resources following the war.

Sometimes the intensity and duration of the conflict make it impossible to stay. But in other cases, conservation workers may be able to find a way to stay on despite the

Box 1.5 Case Study: The Impact of Civil War on the Conservation of Protected Areas in Rwanda

Authors: Andy Plumptre, Michel Masozera, and Amy Vedder

Key points: The genocide that took place in Rwanda in 1994 and the insecurity in the years before and after has created many difficulties in protecting areas of conservation importance in Rwanda. Despite these difficulties, there have been conservation successes, among them the protection of most of the mountain gorillas in the Virunga Volcanoes, and the preservation of the Nyungwe Forest intact. The lessons learned from operating in Rwanda during this time highlight the importance of maintaining a presence during periods of insecurity, as well as the importance of junior staff in enabling conservation efforts to take place.

To access the complete study, go to: www.BSPonline.org/publications.

conflict. Protected areas where conservation organizations have maintained a presence (such as Garamba National Park, Okapi Faunal Reserve, and Kahuzi Biega National Park in DRC, and the Virunga Volcanoes national parks in DRC, Rwanda, and Uganda) have fared relatively well despite the conflicts (Hillman Smith and Mafuko 2000).

Even if more conservation organizations could remain on site during times of conflict, their effectiveness is often constrained by a policy and decision-making climate that does not prioritize conservation. Throughout the 1980s in Mozambique, for example, defense expenditures averaged 38 percent of total government spending, one of the highest rates in the world (Ham, in prep.). While this is an extreme example, during and following times of conflict, the environment often falls to the bottom of the agenda compared to such sectors as agriculture, transport, and commerce. Sustainable use of natural resources, adequate access to land and resources by rural communities, and biodiversity conservation may be overlooked in the haste to set policies that promote immediate post-war economic development.

Although there may be enthusiasm for policy reform in some areas, capacity for formulating and implementing such reforms during this time, including ensuring adequate environmental coverage, is often low. The post-war phase can also be a time of confusion and poor communication within and between government ministries and technical sectors. In addition, communication and collaboration between central, district, and local governments may be poor, further hampering conservation efforts.

Finally, a major obstacle for those trying to work in conservation during or immediately following armed conflict is financial difficulty. In unstable times, donors often scale back or withdraw their support, and it becomes very hard for conservationists to obtain funding. Funding falls off for a variety of reasons. Some donors may pull

out of a country for political reasons. For instance, bilateral donor countries may cut off monies to a recipient country with a different political philosophy. Bilateral and multilateral donors may cut off funding to activities that benefit geographical areas taken by rebels, or they may reprioritize their support to fund other, non-conservation activities exclusively, such as humanitarian aid or efforts to promote good democracy and governance.

Furthermore, many donors are target-driven, and all donors want to see specific results for their investments; they are often unwilling to take risks in case results are not obtained in times of uncertainty. Donors feel most comfortable working with existing partners whom they trust to implement projects and use their funds appropriately. If these partners withdraw, donors may cease funding rather than invest in unknown partners. If conflicts last a long time, donors may pull out completely as donor fatigue sets in.

All of these factors combine to reduce the capacity of the conservation sector during and following times of armed conflict. Beyond these direct impacts and consequences, armed conflicts can also lead to broader consequences that have potentially serious impacts on the environment and those who depend on it.

1.2.5 Vicious circle of conflict, environmental degradation, and poverty

Depletion of biodiversity and the natural resource base because of armed conflict can weaken the chances of lasting peace and sustainable livelihoods for a region's long-term residents. Although conflicts may start for other reasons, there is a risk that resource depletion and environmental degradation can drag a region into a vicious circle: poverty, further political instability, more armed conflict, greater environmental degradation, and even greater poverty.

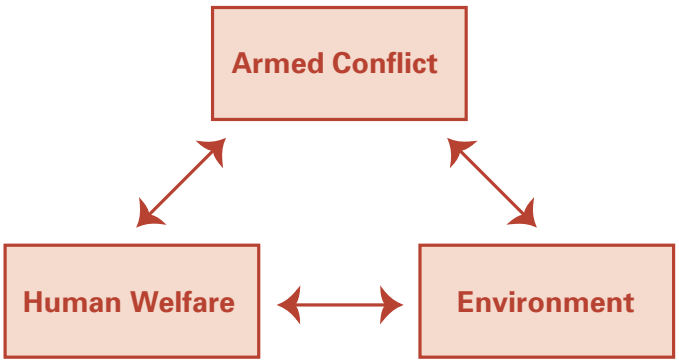

Diagram: Homer-Dixon (1994).

The relationship between natural resource scarcity, environmental degradation, and armed conflict is rarely so clear, however. While links between resource scarcity and conflict may exist, these links may be circumstantial and may not directly follow from the scarcity itself. In many cases, natural resource scarcity and environmental degradation may be more accurately understood as symptoms of larger societal problems, rather than as direct causes of conflict itself (Uvin 1998). Indeed, armed conflicts often exacerbate existing problems as much as they create new ones.

In addition to understanding the impacts of armed conflict on the environment, it is critical to appreciate the broader political, social, and economic context within which conservation is taking place, and how this influences the distribution and use of natural resources and affects the ability of conservation organizations to work effectively in an area.

For more information:

Schwartz *et al.* (2000); Uvin (1998). For an extensive list of works in the field of environmental change and security, see the bibliographical guide to the literature published in the Woodrow Wilson Center's annual *Environmental Change and Security Project Report,* available online at http://ecsp.si.edu.

1.2.6 Further political, social, and economic aspects

Armed conflict can radically alter the political, social, and economic context in which conservation takes place—changing the balance of political power, eroding law and order, destroying local and national economies, and fostering the development of alternative economies that favor elites. At the same time, armed conflicts often fragment societies, disrupt traditional natural resource management systems, divert resources away from development and conservation, and lower the priority of conservation in general.

The conservation sector has relatively little experience in dealing with social, economic, and political issues in armed conflict situations. If conservation is to remain effective during and following times of conflict, however, conservation organizations must understand the broader context in which they are working, assess how this context hampers their effectiveness, and apply this knowledge to the design, implementation, and management of their activities.

During armed conflict, economic strategies are often determined by basic survival needs at all levels, from households to nation-states. At the household level, a shift to greater reliance on subsistence activities and to different kinds of subsistence activities may take place. Agriculture may become impossible, and people may have to live

hand-to-mouth. In such circumstances, natural resources occupy a larger share of livelihood strategies. Shifts in economic strategies often necessitate a shift in social organization, a critical issue given that even subtle disruptions in subsistence activities can result in famine (Theodore Trefon, pers. comm.).

On a larger scale, national economies can collapse for a wide range of reasons, including disruption of trade, loss of outside investment, and loss of tourism revenue. This economic vacuum may swiftly be filled by new illicit trade networks, as various actors exploit natural resources to boost the economy and, often, to finance conflict. In sum, armed conflict often reduces access to resources for many, increases access (often illegal) for a few, and creates a new array of winners and losers.

This section briefly introduces several key political, social, and economic issues that can affect conservation during and following times of armed conflict, including:

- Governance issues
- Illicit trade networks
- Proliferation of arms
- Wartime and post-war rush for resources
- Post-war policy opportunities
- International conventions, legal and policy issues
- Spread of HIV/AIDS.

Recommendations for actions on these issues are found in Chapter 2.

Governance issues

The sustainable management of natural resources depends on good governance—that is, governance that is accountable, transparent, inclusive, participatory, respected, and effective in enforcing law and order. Good governance implies accountability to all local stakeholders, and it implies consideration of and responsiveness to their livelihood interests. In peacetime, good governance is indicated by an ability to reconcile diverse interests, the consideration of local interests in national-level decision-making processes, and a distribution of the obligations and benefits that is accepted by stakeholders and regarded as equitable (Winterbottom and Neme 1997).

During and following times of armed conflict, however, governance structures are often weakened and find themselves unable to control or effectively manage these resources. A common underlying factor in conflict situations is a weak state system, which reduces the ability to maintain territorial integrity, and thus the authority to control access to resources (Theodore Trefon, pers. comm.). Weaknesses in key institutions foster the breakdown of law and order. This, in turn, reduces legitimate,

effective government control and management of natural resources, leading to increased exploitation of those resources. Breakdowns in services and communication exacerbate this loss of control. At the same time, rival factions may be jostling for power, and perhaps even exploiting conservation resources in their power struggles, creating even further disarray. One of the difficulties conservation workers in such circumstances face is knowing whom to deal with in trying to keep conservation efforts going.

Such situations often lead to a power vacuum—one that is usually filled by predatory military and commercial interests. Their ascendancy stresses the economy even more, increases a country's susceptibility to resource exploitation, and may preempt opportunities for positive change in the post-war reconstruction period, thus weakening the state even further. Natural resource benefits are very often captured by elites in the state apparatus, to the detriment of the local people. This is a particularly difficult problem in Africa, where many recent conflicts have been fought over its rich natural resources, and have been perpetuated by inadequate governance of these resources. Improving environmental governance under these circumstances requires building governance capacity, as well as changing political processes and governance relationships among civil society, private sector, and the state.

Governance is exercised by various kinds of authorities, which can be roughly categorized into traditional and modern (the modern authority is the state, with its legal structure), although in many countries in sub-Saharan Africa these overlap. State authority is often diminished in an armed conflict, sometimes leaving only traditional authorities. In such circumstances, it becomes important to establish, maintain, and reinforce relations with traditional authorities (e.g., local chiefs with traditional control over local resource allocation), and to engage them in dealing with conflict-related threats to natural resources in areas under their control. However, it is also important not to accept or legitimize traditional authorities uncritically, because they are not necessarily accountable to populations in their jurisdictions. Always find out to whom—if anyone—the authority is accountable, regardless of the identity of that authority, and ask whether all parties regard the allocation of rights and responsibilities as equitable.

Illicit trade networks

Weak or failed states, lawlessness, collapsed local or national economies, and increased reliance on natural resources during times of armed conflict all provide fertile ground for the development of illicit trade networks (de Merode 1998). The development of these networks—which can include everything from peddling bushmeat at local markets to selling timber and diamonds at the international level—is a logical outcome in contexts where natural resources with immediately redeemable values become the only credible tender (Hart and Mwinyihali 2001 and Box 1.6).

Box 1.6 Case Study: Armed Conflict and Biodiversity in Sub-Saharan Africa: The Case of the Democratic Republic of Congo (DRC)

Authors: Terese Hart and Robert Mwinyihali

Key points: This case study examined the impacts of recent armed conflicts on biodiversity conservation in DRC, focusing primarily on the country's system of reserves, national parks, and other protected areas. Although conservation in DRC faces enormous challenges, this study asserts that a major international effort adequately supported by both national and international conservation organizations, as well as individual conservationists, can achieve conservation goals. Vital to such efforts are long-term guarantees of support and training for national conservationists and long-term maintenance funding for protected areas deemed to be of international conservation value.

To access the complete study, go to: www.BSPonline.org/publications.

Since illicit trade occurs largely through informal networks, it can be very difficult to measure and control. The advocacy section of this guide highlights a number of ways that conservation organizations can use their knowledge of conditions at the site level to raise international awareness and inform policy makers of ways to combat these networks. Other strategies to combat illicit trade networks, discussed later in this guide, include certifying natural resources (among them, timber and diamonds), imposing international sanctions, and applying international conventions.

Any discussion of illicit trade networks must also include a discussion of the proliferation of arms, to which these networks are often closely linked.

Proliferation of arms

The availability of arms, and the illegal exploitation of diamonds, timber, ivory, and other natural resources, is part of a vicious cycle in which these resources are used to purchase or barter for arms. These weapons, in turn, enable armed groups to maintain control over source areas for valuable resources and to develop and control illegal trade networks. Proliferation of arms from conflicts is also a major cause of increased illegal hunting in many countries, not just for those countries directly engaged in conflict, but also for neighboring countries into which these arms are brought (e.g., from Somalia to Kenya).

Governing authorities can also use natural resources to finance conflict. This can be done, for example, by using sales revenues from commercial resource extraction to finance wartime activities; collecting taxes for mineral extraction in controlled territory; collecting payments from businesses for army protection; and allowing direct

payoffs to soldiers instead of paying them regular salaries. These war economies feed a vicious circle from violence to economic exploitation of natural resources (such as diamonds or gold) and back to violence (International Famine Centre 2000). The recent civil war in Sierra Leone provides an example of such a war economy (Squire 2001).

Financing conflict using natural resources would be difficult without a market for those resources, including international companies eager to buy them. Nor could arms proliferation occur without the complicity of international arms dealers, suppliers in arms-manufacturing countries, and other trade organizations—a critical point to consider when developing potential response strategies.

The advocacy section of this guide (Section 2.2.6) highlights a number of ways that conservation organizations can use their knowledge of conditions at the site level to raise international awareness, inform policy makers about the proliferation of arms, and galvanize broader efforts to combat this problem.

Post-conflict rush for resources

The environment is often most vulnerable during the transition period between the cessation of hostilities and the re-establishment of effective control and management of natural resources. This is the time when the most severe environmental impacts may occur. Immediately following conflict, governing authorities are starved for cash—they urgently need to kick-start the economy and pay off war debts. But both state and traditional controls are weak, and the interests of local communities are often low on the political agenda. At this critical moment, the private sector often stands poised to move in as soon as possible. Governments may grant private firms very favorable concessions—on terms that may be perfectly legal but are not always in the country's best long-term interests. In addition, unscrupulous elements of the private sector may take advantage of the situation and extract resources illegally.

Box 1.7 Case Study: Sierra Leone's Biodiversity and the Civil War

Author: Chris Squire

Key points: Civil war has become a serious threat to biodiversity in Sierra Leone in recent years, both by virtue of its inherent destructive capacity, and its domino effect on other related causes of biodiversity loss. Yet to date, little attention has been focused on the impacts of the recent civil war on the country's biodiversity. This qualitative study considered that significant civil war-related biodiversity loss had occurred, and underscored the need for detailed on-site assessments of these impacts as soon as normality returns and areas are accessible. Finally, the study highlighted a number of potential strategies for mitigating these impacts.

To access the complete study, go to: www.BSPonline.org/publications.

Complicating matters further, the post-war phase is often a time of confusion and poor communication within and between government ministries and technical sectors. Central, district, and local governments may find it very difficult to achieve the most basic communications. The environment is often low on the agenda and not adequately taken into account in sectors such as agriculture, transport, and commerce. In their haste to set policies that promote economic development and boost the national economy, governments may overlook the need for sustainable use of natural resources, conservation of biodiversity, and the granting of adequate access to land and resources to rural communities. This combination can have potentially dire consequences for the environment. In the case of Liberia, the passage of a Strategic Commodities Act, legislation that places the country's natural resources under the president's direct control, has effectively accelerated natural resource extraction in the country (Global Witness 2001).

Despite the tremendous challenges for conservation during the immediate post-conflict period, however, there are also opportunities for post-war policy reform, which can help mitigate this rush for resources and the devastating environmental impacts it causes.

Post-conflict policy opportunities

The post-war period may also offer excellent opportunities for policy reforms that, if well planned, can help to promote sustainable rural livelihoods and conservation. However, new policies can also be detrimental, making it very important that the environmental sector participate in policy reform. In DRC following the 1996-1997 war, the Institut Congolais pour la Conservation de la Nature (Congolese Institute for the Conservation of Nature, or ICCN) and its long-term partners jointly collaborated to approach the new government—a major step in ensuring that environmental issues were high on the redevelopment agenda and that policy decisions could be promoted (Kes Hillman Smith, pers. comm.).

Sweeping new policy reforms are often put in place in the post-war era—reforms that may have large impacts on biodiversity, natural resources, and rural people's livelihoods for years to come. Often, the post-war period brings a new willingness to adopt different systems and policy models. There is often a window of opportunity for countries to update old, out-of-date, or inappropriate policies in a new climate of openness. These include natural resource, conservation, and environmental policies, as well as policies covering other sectors that may impact, directly or indirectly, on the environment.

For example, the Mozambican government showed much greater openness to community-based natural resource management after the recent war, and incorporated this into revised land and natural resource policy and legislation. At the same time, the land policy provided for increased private sector concession activities in support of economic development (Hatton *et al.* 2001).

However, even where there is enthusiasm for policy reform in the post-war period, capacity for formulating and implementing reform may be low. At this time the government may be run by a new group of political decision makers and policy planners who may have little technical training or experience in government processes, good governance, and policy making. Moreover, in many countries, capacity is often inherently low in the natural resource and environment sector, even during peacetime. Nevertheless, it remains very important that natural resource/environment technical staff in government play an active role in policy reform, both in their own sector and in other sectors that affect the environment. The latter is very important if governments are to ensure that adequate attention is paid to natural resource and environmental considerations in policies covering agriculture, transport, and mining. Networking between sectors plays an important role. A government's environment staff need to develop good working relationships across sectors and need to keep abreast of current developments as it sets its agenda and prioritizes its efforts. Structures such as inter-ministerial environment committees may be a useful forum, if they exist. Government staff can also influence the policy-making process to promote participation by all levels and avoid an exclusively top-down approach.

NGOs, religious groups, and community-based organizations can provide information as a basis for policy (e.g., information on biodiversity, natural resources, and community use of resources). They can help to build capacity for policy formulation (e.g., by arranging short training courses and study tours to other countries so policy makers can see different policies in action). If policy making is participatory, these groups can help formulate and review policy. Their knowledge may enable the prediction of likely short- and long-term consequences of proposed policies. If necessary, they can act as watchdogs on policy development and lobby for changes to process and content before new policies are finalized.

Donors can provide funding for policy reform and may be able to encourage a fair and open process. Many countries create new ministry-level, donor-funded expatriate natural resource and environment policy planning positions during post-war periods. New policies demonstrate to donors at this critical time that strategies are being developed for the future, and often help to attract funding.

Legal and policy issues: the role of international conventions

In theory, armed conflict is governed by an international legal framework that restrains the conduct of soldiers toward civilians and noncombatants, the natural environment, and any other nonmilitary targets, including wildlife. In practice, these laws are often ineffective, particularly during civil wars and other internal conflicts. Yet there has been increasing awareness of international conventions that protect the environment, and the need to improve their enforceability. Even in the absence of a controlling legal authority, the very existence of international conventions may provide moral justification and financial means (e.g., by helping to attract donor funds) for continuing conservation work during conflict (Jay Austin, pers. comm.).

Box 1.8 IUCN Draft Convention on the Prohibition of Hostile Military Activities in Protected Areas

Seeking to fill the gaps left by both the law of war and international environmental law, the World Conservation Union (IUCN) has recently proposed a Draft Convention on the Prohibition of Hostile Military Activities in Protected Areas. If adopted, this treaty would provide special protection during armed conflict for "natural or cultural area[s] of outstanding international significance" designated by the UN Security Council. The designations would draw upon existing designations, such as World Heritage Sites or Biosphere Reserves, but also could be extended to include national parks and other areas that currently might not enjoy international status. Additional treaty provisions could be drafted to provide a special protected status for conservation workers, though the current IUCN Draft Convention does not include this concept. The draft also needs to be amended to strengthen its enforcement provisions, and to ensure that it will apply to all armed conflicts, internal as well as international.

The IUCN Draft Convention is still a work in progress, and even the creation of paper protections and faraway legal institutions will be no guarantee that atrocities will not continue to occur in the field. In the interim, or where the rule of law has broken down, existing international conventions still can serve as tools of moral persuasion, hooks for publicity and awareness raising, and vehicles for financial and technical assistance.

Source: Jay Austin.

International environmental law provides specific protections for the natural environment and wildlife that may extend to times of armed conflict. For example, the 1972 United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Convention establishes a clear framework for protection of designated World Heritage Sites, and its language suggests that it is meant to apply during wartime. By itself, this convention does not automatically have an effect on the ground, and it must be recognized that the World Heritage Convention has not always fulfilled the role expected of it at the international level. Key personnel at relevant sites must be made aware of the convention's potential, and then use it to support site conservation. The UNESCO/United Nations Foundation program for the conservation of the five World Heritage Sites in DRC is a classic example (see Box 1.9). Committed NGO partners and ICCN formed a coalition to use financial support from UNF, political support from UNESCO, and the strength of their own collaboration to develop a program that is already proving how conservation in armed conflict can not only continue, but be improved (Jay Austin, pers. comm.; Kalpers 2001b).

The Convention on International Trade in Endangered Species (CITES) restricts cross-border traffic in endangered animal and plant species at all times, as well as providing monitoring and enforcement mechanisms. However, the CITES treaty is primarily targeted at the problems caused by "business as usual," rather than the extreme emergency situations created by armed conflict (Jay Austin, pers. comm.).

Box 1.9 World Heritage status as a conservation tool: the UNF/UNESCO project

Working in collaboration with a variety of locally active conservation NGOs, technical cooperation agencies, and national institutions, UNESCO is working with UNF (a private foundation) to support a massive intervention in the five World Heritage sites in DRC: Virunga National Park, Garamba National Park, Salonga National Park, Kahuzi-Biega National Park, and Okapi Faunal Reserve. This intervention, scheduled to last four years, will provide a short-term lifeline to these five seriously threatened protected areas. Apart from providing emergency funds on numerous levels—for instance, staff salaries, equipment purchases, capacity building, and improving relations with local communities—the program also has a diplomatic component that strives to raise the awareness of all warring factions about the importance of conservation in the region.

Source: Kalpers (2001b); Hart and Mwinyihali (2001).

Finally, in the aftermath of armed conflict, there have been increasing calls for ad-hoc legal mechanisms that could hold governing authorities and individuals financially accountable for damages to natural resources and wildlife. One existing model is the United Nations Compensation Commission, created to assess civil liability against the government of Iraq for its actions during the Persian Gulf War. The recent UN Panel of Experts report on DRC calls for a similar commission to investigate and adjudicate damage claims by the Congolese government (United Nations 2001). Another suggestion proposes that funds be set aside to create an international environmental emergency task force that would assess and mitigate environmental damage even before lengthy civil claims procedures are put into place (Austin and Bruch, in press).

Such legal mechanisms would require clear evidence proving the responsible parties' culpability, including proof of who the responsible actors are. Conservation organizations can play an important role in gathering this information (see also Sections 2.1.8, 2.2.2, and 2.2.6).

For more information on legal and policy issues:
Austin and Bruch (2000); Austin and Bruch (in press); and Tarasofsky (2000).

Spread of HIV/AIDS

In regions of armed conflict, people are more at risk of HIV infection than in peacetime, through the presence of armed forces and from social dislocation and insecurity. The breakdown of social structure and legal protection results in more transitory sexual relationships, involving more partners. Rape is often used as a weapon of war. Women and children may be forced to turn to prostitution when normal livelihood activities become impossible during conflict. HIV education and preventive means during sex are often lacking for both the general population and the armed forces.

HIV infection rates in military and peacekeeping forces tend to be up to five times higher than in the general population, and much higher during conflict. All this contributes to a greater spread of HIV during conflict. It may also serve to prolong conflict as it places new strains on health and economic infrastructures, and destabilizes family and social structures (Kristoffersson 2000).

The increased spread of HIV due to conflict can have serious consequences for the environment. Conservation organizations in Africa are already tragically losing valuable staff to AIDS in peacetime, including trained and experienced senior staff. This is seriously affecting their capacity to undertake conservation programs in many countries, including South Africa (Trevor Sandwith, pers. comm.). An increase in the spread of HIV during conflict would make staff even more vulnerable. Maintaining and building organizational capacity is critical for mitigating the impacts of conflict on the environment during and immediately after conflict (Section 2.1). Loss of staff to AIDS at this time could have a very serious impact on the environment.

The relationship between AIDS, rural economies, and natural resources is poorly understood. The most economically active members of households are most likely to die of AIDS. This, for example, reduces households' capacity for heavy agricultural labor. Does this result in a switch to less labor-intensive production techniques and crops? What impact does this have on the size of area cultivated and other environmental aspects? Is there a greater reliance on natural resources? Little is known to date, but it is very possible that an increase in the spread of HIV during conflict will have long-term repercussions for the environment in many indirect ways.

Summary

In sum, a solid understanding of the broader political, social, and economic context is essential for effective conservation in areas of armed conflict. While this section highlighted many of the challenges and difficulties confronting conservation, it also pointed to a number of opportunities that may exist for preparing for, coping with, and recovering from periods of armed conflict. Assessing these challenges and opportunities is essential for developing an appropriate and effective conservation strategy—the subject of the next chapter.

CHAPTER
2

What can be done?

2 What can be done?

Armed conflicts add complexity and present new challenges, difficulties, and risks for conservation. Often there is little that the conservation sector and its collaborators can do to avoid adverse environmental impacts: the forces that cause them are much larger than any efforts conservation staff can undertake to prevent them. Sometimes, though, there are actions that can be taken to reduce these impacts, even if they cannot be avoided entirely. Actions at the right time and in the right place can collectively make a significant difference in conserving natural resources and biodiversity, and ultimately in promoting sustainable livelihoods and maintaining long-term stability in an area once conflict ends.

Taking action to mitigate the effects of armed conflict can involve conservation organizations in many activities outside their normal range of operations. Their approach may become broader. For example, in order to achieve conservation goals they may become involved in development and social activities in collaboration with organizations from the relief, development, and planning sectors. During armed conflict, they may have to strengthen the linkages between conservation and humanitarian relief work. Conservation groups may need to develop new skills to work in armed conflict situations and make internal changes in the way they operate.

Close collaboration with local traditional, civil, and military authorities at all levels, development of diplomatic negotiation skills, and flexibility in relation to changing authorities may become more important. Organizations in broad landscape situations may already be working in a multi-disciplinary manner, and may have to adapt less than those working solely in protected areas. There may be significant changes in funding sources and funding levels for activities at this time. If the conservation sector is absent, the relief and development sectors can mitigate environmental impacts by incorporating environmental considerations into their programs.

Box 2.1 Conservation in conflict: the IGCP experience

The experience of the International Gorilla Conservation Programme (IGCP) provides a good illustration of how actions taken at the right time and in the right place can make a critical difference in both the short- and long-term stability of an area.

IGCP, a coalition of three international conservation organizations (African Wildlife Foundation, Fauna and Flora International, and World Wide Fund for Nature–International), was formed in 1991 to pool technical and financial resources to increase effectiveness in their common objective of gorilla conservation.

The Virunga Volcanoes range, home to the mountain gorilla, straddles the borders of Uganda, Rwanda, and DRC. This region has witnessed more than a decade of armed conflict and instability, which has created enormous difficulties for conservation. By working collaboratively with other conservation organizations as well as with organizations from other sectors and the surrounding communities, IGCP has effectively responded to these crises, maintaining conservation activities while promoting and making a significant economic contribution to sustainable livelihoods.

Source: Kalpers 2001a; Plumptre *et al.* 2001.

Measures may be taken to mitigate armed conflict impacts on the environment during three main stages:

- **Prevention and preparedness:** before a crisis strikes, a proactive approach can make a tremendous difference in achieving conservation during and after conflict.
- **Coping and mitigation:** during the crisis, coping strategies can help ease the adverse impacts of conflict on the environment and make the most of opportunities that arise. This stage includes the period during conflict and the transition phase to peace.
- **Post-crisis:** when conflict is over, recovery, rehabilitation, and longer-term reconstruction programs can be developed and supported to promote appropriate environmental action.

It is very important to note that there are no blueprints about what course to follow. Each situation is different, and there are no universal panaceas. It is important to accept that what can be done is likely to be limited, but it is much better to try to achieve something than it is to lose a lot more.

The following sections cover three major areas of activity:

- Organizational response
- Collaboration
- Funding and finance issues.

2.1 Organizational response

Even when there is little indication of potential problems, conservation organizations should still plan for situations of insecurity. This includes planning for different levels of preparedness, and ensuring that all project staff are aware of these plans in case of emergency. Anticipating problems and planning responses prior to an actual situation are far better than trying to adapt and communicate with staff from afar during a crisis. Staff can also be trained in skills they are likely to need during and immediately after conflict.

One of the most important factors during times of conflict is to try to maintain a presence. In order to do this, it is important to develop greater flexibility in an organization's core priorities. Organizations must be ready to adapt as the situation develops, and look for opportunities as they arise. This may include working in a different way: for example, broadening protected area categories to permit appropriate multiple zoning and use, promoting landscape-level conservation and multiple land uses, or using alternative and opportunistic strategies to maintain local support. Key to this are a sound long-term understanding of the field situation, and a commitment to continue working despite the risks.

The following key issues are discussed in more detail:

- Assessment, response, monitoring, and adaptation
- Maintaining a presence
- Personnel management
- Communication
- Training for times of conflict
- Training for peacetime
- Need for organizational and programmatic flexibility
- Maintaining neutrality.

2.1.1 Assessment, response, monitoring, and adaptation

Who is this for?

Directors and personnel managers in NGOs, government departments, projects, and donors with staff in the field.

What is the issue?

In order to be effective, conservation organizations need to assess and respond to changing conditions during conflict, monitor their progress, and adapt accordingly.

Why is it important?

Circumstances can change drastically during and following periods of armed conflict. Political, economic, and social conditions fluctuate as the balance of power shifts and law and order successively break down and are restored. These circumstances are often far outside the normal set of conditions that prevail during peace, confronting conservation organizations with a whole new set of questions: "Do we pull out or not?" "Can we afford to maintain basic operations or not?" "Will we lose our past results?" "Can we secure full (internal) organizational support?" "Can we avoid crisis management?" "Do we have the capacity and expertise to remain effective under the new conditions?" "Is the project still relevant to the changing context?" (Sylvie Wabbes Candotti, pers. comm.).

How to address it?

In order to achieve conservation goals as effectively as possible immediately before, during, and after armed conflict, organizations need to be able to understand and respond to these new and changing conditions. To do this, they need to make a broad ongoing assessment of the situation with respect to their own goals and operations; develop appropriate responses; monitor both the changing situation and the effectiveness of their responses; and adapt their responses accordingly. These steps are outlined in more detail below.

Assessment

Assessment requires collecting relevant information on the broad political, economic, social, and environmental context to form a basis for decision making, and then analyzing the information in light of long-term goals.

The process includes:

- **Collection of relevant information** on the conflict, including its nature and root causes; the political, social, and macro-economic context; incentives and capacities of behind-the-scenes actors to exert influence; and up-to-date information on actual and likely developments and impacts. Information should be collected at local, national, and international levels via networks of reliable sources within each country and region.

- **Assessment of threats and opportunities** in the short and longer term, in light of the information collected above. This involves predicting how the conflict may develop, and assessing potential direct and indirect consequences for the environment, and also for the organization (the latter is covered in more detail in the following sections).

- **Assessment of the organization's capacity to respond** to the situation, including a needs assessment (both immediate and longer term), as well as a resource assessment. The needs assessment should include staffing, training, funding, equipment, infrastructure, communications, and logistics. The resource assessment should cover the organization's existing resources, its priority needs, and its potential for raising further support.

To gain the broadest perspective and understanding of the situation, it is critical to collect information and analyze the situation in collaboration with partners and others, at different levels and from many angles. This process can also create a basis for future collaboration. The UNESCO/UNF/DRC program is a strong example of this. The long-term committed partners from both NGOs and ICCN worked together to assess needs and to develop and implement a realistic response, one that both addressed the most basic ground-level requirements, and that transcended political divides by emphasizing the neutrality and internationality of conservation.

To use this information for decision making, it is important to document it. A summary of the problems in times of conflict affecting NGO partners' conservation efforts in DRC from 1994 to 2001 is given in Table 2.1.

Planning a response strategy

There is no standard blueprint format for a response strategy. Plans cannot be transferred unaltered from one situation to another, as each situation has its own unique set of circumstances. But while different plans need to be developed for each situation, there are some general principles and guiding ideas to keep in mind, regardless of the situation:

- **Define long-term goals clearly.** When developing a response strategy, it is important to start with clearly stated long-term goals. These goals provide a long-term rationale and target to work toward during both conflict and peace. Having clear long-term goals can be especially important during periods of armed conflict, when short-term needs often take precedence and force a temporary shift in priorities.

- **Be realistic and flexible.** The plan should outline a realistic, feasible way to work toward achieving goals, based on the assessment. It is important not to be overly ambitious about what can be achieved in times of conflict, but to draw up a creative, realistic plan that allows for flexibility in implementation time and for changing circumstances. The strategy itself may have to be revised many times in response to the situation; it should not be regarded as a fixed blueprint plan that must be executed in a set way, from start to finish.

- **Be proactive, not only reactive.** Plan interventions based on predicted, likely developments, and be prepared ahead of time for changes in circumstances. Often

during armed conflict, narrow windows of opportunity may suddenly open up, allowing much to be achieved toward conservation goals, but the same windows may also close just as rapidly (see Box 2.2). Try to anticipate events and be proactive; by only responding reactively, when events happen, there is a risk of being a step behind all the time.

- **Include interventions at different organizational levels.** Where possible, aim to work at multiple levels and design the most appropriate actions for each level: international, national, and local. An intervention at one level may remove a constraint occurring at another level.

Monitoring and adaptation

During periods of armed conflict, two types of monitoring are required:

- **Monitoring the general situation.** Since circumstances can change very quickly in armed conflict situations, it is important to monitor them closely, in order to adapt, and continue to be as effective as possible. This includes monitoring

Box 2.2 A window of opportunity: Preparing for Peace workshop in DRC

BSP learned a useful lesson on windows of opportunity during its Armed Conflict and Environment Project. Early on, it became clear that promoting collaboration between conservation organizations and the relief and development sectors was an important strategy for mitigating the environmental impacts of humanitarian interventions. Efforts were made to organize a national workshop to examine and promote such collaboration, and an African country that had recently emerged from conflict was selected. However, there was little buy-in for the idea in government circles, as it was not seen as a priority at that stage.

The project looked for another country and switched to DRC. The concept evolved in discussion with key DRC organizations. The workshop would promote collaboration not only between disciplines, but also between government and NGOs, and would focus on environmental aspects of preparing for peace. A date was set in February 2001, although the "Preparing for Peace" title had to be dropped for political reasons, and there was some concern about how open the discussions on this aspect could be, given the stage of the conflict around that time. In January 2001, President Laurent Kabila was assassinated. The workshop was postponed until June 2001, at which time there was a much more positive attitude toward peace. There was tremendous enthusiasm and support for the event from the highest levels. It was attended by over 150 people, including four government ministers and a high-ranking officer from the military. Doves were released in a ceremony as a symbol of peace.

Holding the workshop in June was much more effective in helping to prepare for the transition to peace than it would have been four months earlier. The project was able to make good use of this window of opportunity.

Source: Authors.

Table 2.1 Summary of problems in times of conflict affecting NGO partners' conservation efforts in Eastern DRC from 1994 to 2001

Categories of issues	Before the first war (1994-1996)	During the first war (October 1996–December 1997)	After the first war (June 1997–July 1998), rehabilitation period	During the second war (August 1998–2001)
Political issues	Decline of the overall political system.	National war with one front.	Coalition of NGOs approached new government to raise environmental issues in rehabilitation agenda and develop relations with new government.	Economic and regional conflict between parties over resources.
Policy issues	Outdated policies and legislation.	"Rule of gun" took priority during immediate conflict.	Priority areas identified, begin to be tackled.	Relatively fluid power structure with strong military influence.
Institutional issues with national authorities	Weakened national authorities and irregular to non-existent national salaries and funding led to NGOs filling gap and developing partnerships and support structures that facilitated continuing support.	Basic operations constrained by disarmament policy and initial distrust. Re-established by negotiation and facilitated by existing NGO support structures for salary substitutes.	Rejuvenation of institutional HQ and ministry. Long-term commitment and collaborative approach strengthened planning and implementation links between field NGO partners and HQ. Round Table meeting of environmental supporters hosted by minister, July 1997.	Several new authorities in rebel territory and frequent staff changes.
Funding issues	Increasingly difficult to secure significant funding and to coordinate interests. Bilateral sanctions on funding since 1991.	Basic support continued, and partners made every effort to get it into the field.	Slow release of funding, with "wait-and-see" attitude in some cases. Emergency support responded rapidly to clear results and proven ability to achieve.	Collaborative approach by partners and ICCN with UNESCO and UNF raised major funds and increased donor confidence and commitment.
Financial issues	Unreliable banking system, so alternative systems, e.g. missions, in use.	Cash transfer became impossible for a few months, then re-established by hand carrying.	Mission systems not re-established. Personal transport of funds continued and local businesses changed.	Existence of UNESCO/UNF program with NGO partners strengthened financial guarantees and political facilitation of work.
Economic issues	Growing problems.	Conflict affected trade and income.	Recovery with some hopes after the 1996-1997 war.	Problems increasing with duration of conflict.
Infrastructure/ logistics issues	Never easy within the country, but alternative support structures in place at each project.	Heavy losses of capital and infrastructure investment.	High costs to replace and mobilize resources for rehabilitation work.	Curtailed rehabilitation. No further major losses, but increased risks with duration of conflict. Potential for misuse of resources in unstable situation.
Social issues	No more national salaries. Salary substitutes and bonuses, basic health and education services provided by NGOs.	Daily subsistence strategies affected. Back pay as soon as possible where NGO partners present.	Huge needs compared to responses.	Increased with time and drop in development assistance.

(Table 2.1 continued on next page)

Table 2.1 continued

Categories of issues	Before the first war (1994-1996)	During the first war (October 1996–December 1997)	After the first war (June 1997–July 1998), rehabilitation period	During the second war (August 1998–2001)
Security issues	Not a major problem, occasional riots and looting e.g., 1991, 1993, and military presence on borders, some robberies in towns. Hassle factor discouraged tourism.	High risks and casualties for staff and goods.	Awareness of remaining pockets of insecurity.	Ongoing risks minimized by security awareness, communication with authorities.
Ecological issues	Increasing pressure on natural resources, largely associated with neighboring conflicts.	Major poaching and resource exploitation.	Rehabilitation of law enforcement and reduction of threats.	Resource exploitation of minerals with associated destruction of wildlife for food, agricultural exploitation of some parks with reduced capacity and authority for law enforcement.

Source: Adapted from Wabbes Candotti (2000), with contributions from other partners.

political, economic, and social aspects of a situation, as well as any changes in threats to environmental goals, and in opportunities for interventions. Use a variety of sources to gain a broad picture at multiple levels, and also to verify their accuracy, since rumors can abound in these times.

- **Monitoring the effectiveness of interventions.** Which interventions were most effective in contributing to the goals, directly or indirectly? Which failed? It is very important to learn from failures as well as from successes. Resources are often especially limited in conflict situations, and organizations have to make difficult choices about which interventions to undertake. Many conservation organizations have little experience with working in conflict situations, and it is important to build up experiences of different approaches, to use resources more effectively in the future.

The most useful types of indicators for conservation organizations in armed conflict situations are likely to be those that provide quick answers with a reasonable degree of accuracy, and which can be measured easily and inexpensively. Biological indicators may not be very useful, as they often take a long time to show changes. For example, use of satellite imagery to monitor forest cover near a refugee camp does not give early warning of problems; it only indicates a problem when it has already happened. It would be more useful to use threat indicators, such as the number of sacks of charcoal or truckloads of firewood observed leaving the forest every day. The

threat-reduction assessment outlined by Margoluis and Salafsky (2001) might be particularly useful in a conflict situation, applied over a short time span, if threats are changing frequently. Regular review and reprioritization of threats and adaptation of interventions is essential in order to work effectively during conflict.

In the Virungas, IGCP and park staff developed a simple monitoring program to generate basic information for use by protected-area managers in planning, evaluating, and redirecting management actions (see Box 2.3).

For more information:

Conservation International (2001), Cuny and Hill (1999), and Margoluis and Salafsky (2001).

Box 2.3 Ranger-Based Monitoring (RBM) in the Virungas

In terms of a proactive response to conflict within protected-area authorities, the work of the International Gorilla Conservation Program (IGCP) with government partners on monitoring is a prime example. With deteriorating conditions in DRC following the refugee crisis period (1994-1996) and wars of the 1990s that resulted in massive forest cutting and land degradation, IGCP and park staff needed a more precise way to gather data to direct limited financial and human resources. In 1997 they developed a simple monitoring program, called Ranger-Based Monitoring (RBM) because it is implemented by park rangers rather than external researchers or scientists. This quickly picked up momentum in DRC in spite of the unstable security situation there, and then spread to Rwanda and Uganda.

IGCP has now trained groups of park field staff in monitoring techniques in all three countries, and the RBM program is fully operational regionally, implemented by staff of each of the three protected-area authorities. These teams produce a steady flow of information on the status of the mountain gorillas, the quality of their habitat and the presence of threats. RBM is a practical way to generate basic information for use by protected-area managers in planning, evaluating and redirecting management actions, such as law enforcement, surveillance of the ecosystem (including vulnerable species), tourism and human impact. This contributes strongly to more effective regional management and protection of this shared resource, even in the face of armed conflict.

Source: Katie Frohardt, pers. comm.

2.1.2 Maintaining a presence

Who is this for?

Directors and personnel managers of NGOs, government departments, projects, and donors with staff in the field.

What is the issue?

One of the most important challenges for conservation organizations is maintaining a presence during armed conflict, so they can continue to support conservation and natural resource management however possible.

This is not to suggest that staff should stay on site at all costs, but rather to highlight actions that can improve security and may permit an organization to maintain a presence in some way, where it might not have otherwise been possible.

Why is it important?

If conservation organizations maintain a presence during conflict, they are more likely to be able to:

- Protect their previous investments in conservation and natural resource management
- Mitigate possible negative environmental impacts during conflict and the transition to peace
- Maintain their own capacity and support capacity building in partners
- Maintain relationships and respect of partners (including government respect for NGOs—see Box 2.4)
- Promote better environmental governance, for example, through advocacy, neutral facilitation, or watchdog efforts
- Influence rehabilitation and post-war policy reforms to promote sound use of natural resources for sustainable rural livelihoods and conservation of biodiversity.

Box 2.4 Maintaining a presence

Maintaining a presence during conflict benefited the international NGOs that work in the Virunga Volcanoes and the Nyungwe Forest Reserve. They became highly respected by the new government for their commitment to the country at a time when many major donors withdrew. This has allowed these NGOs to play an important role in conservation activities in the country. For instance, since 1994, several major threats to the Volcanoes National Park have been averted because of the presence of these NGOs and committed Rwandan national parks department (Office Rwandais du Tourisme et Parcs Nationaux, or ORTPN) staff in the field. These threats include removing protected area status from a portion of the park for cattle grazing, resettling refugees from the Gishwati Forest in the park, and most recently constructing a road across the park to Djomba in DRC.

Source: Plumptre *et al.* (2001).

ACE project case studies suggest that those sites, projects, and national offices where conservation organizations maintained a presence during conflict tended to survive crises better, and ultimately achieved more successful conservation. Location, intensity, and duration of the conflict are factors here; at sites in the center of intense and prolonged conflict it is often impossible to maintain a presence and it would be foolish to try. However, a comparison of projects that stayed with those that pulled out demonstrates the importance of maintaining a presence, if at all feasible (see Boxes 2.4 and 2.5).

How to address it?

Foster staff commitment. Two factors are crucial to maintaining a presence: committed staff and adequate funding. Funding is covered in Section 2.3. Staff who are dedicated to their work are more likely to stay on when conditions become difficult. In Rwandan protected areas, part of staff members' training focused on the uniqueness of the forest. When conflict came, one of the reasons staff members held their posts was because they believed their work was important to the country (Plumptre *et al.*, 2001). This emphasizes the need to teach all staff about the broader relevance of their work. Furthermore, staff are much more likely to stay on if they are well looked after and well prepared. For example, regular salary payments are very important (see Section 2.1.3 on personnel management). Staff also need training in special skills to deal with conflict situations (see Section 2.1.5 on training).

Box 2.5 Case Study: The History of Armed Conflict and its Impact on Biodiversity in the Central African Republic

Authors: Allard Blom and Jean Yamindou

Key points: Recent armed conflicts in the Central African Republic (CAR) have had a devastating impact on the country and its biodiversity. Beyond the direct loss of human life, these conflicts have contributed to overall instability, a degraded infrastructure, a weakened economy, and a decrease in social services such as health care and education. In general, neither the conservation nor the development sectors have adequately dealt with these conflicts and their consequences. Conservation organizations need to consider hiring staff with appropriate experience to deal with crisis circumstances and devise policies to deal with such crises more effectively.

Keeping offices and safeguarding equipment: In CAR's capital, Bangui, WWF and GTZ offices survived the looting in 1996 relatively unharmed because expatriate staff stayed on and were able to negotiate with looters, build confidence of local staff to guard the offices, and make essential decisions unilaterally without consulting headquarters. Other project offices that did not maintain such a presence were severely affected, losing equipment and vehicles and suffering serious delays or cancellations to their projects.

To access the complete study, go to: www.BSPonline.org/publications.

If it is necessary to withdraw from a site, try to stay active in the region. Even if an organization is forced to withdraw from an individual site, it is important to maintain a presence in other sites, and to maintain a national office. In extreme cases, if an organization such as an international NGO has to withdraw from a country, it is advantageous to maintain a presence in a nearby country and stay poised to return as soon as possible, or even to provide support from outside. For example, IUCN established a new regional office in Cameroon when it had to withdraw from Brazzaville in the Republic of Congo in 1997, and continued to support regional conservation from Cameroon (Harry van der Linde, pers. comm.).

2.1.3 Personnel management

Who is this for?

Directors and personnel managers of NGOs, government departments, projects, and donors with staff in the field.

What is the issue?

One of the most crucial requirements for maintaining a presence is committed staff. Staff who are dedicated to their work are more likely to stay on when conditions become difficult.

Why is it important?

An organization's staff are its most important asset: without them it cannot function. A cadre of committed, well-prepared staff is essential if an organization is to work effectively on mitigating the impacts of armed conflict on the environment (Plumptre *et al.* 2001). People will only commit themselves to an organization if it looks after them well and if they believe in its mission. This means having good personnel management to ensure staff's basic safety and well-being, and providing good conditions of employment. (Training staff for conflict, and encouraging them to believe in the organization's mission, are covered separately under the training strategies below.)

How to address it?

Assess the adequacy of staff security, and develop security measures.
A threat assessment is an analysis of the likelihood of confronting potential threats. It is useful in order to make better-informed decisions about which security measures are likely to be most appropriate and effective. A threat assessment requires five types of information: type of threat; situations in which the threats could be encountered;

threat level; potential changes in threats; and causes of the threats (for instance, crime or banditry; threats that directly target staff or the organization, or indirect threats where staff or the organization are unintentionally affected when another group is targeted).

Once this information is available, assess the vulnerability of the organization and its staff to the threats. Vulnerability is affected by location; exposure of staff and property; value of property; impact of programs (for example, a conservation program that benefits local communities may be less vulnerable than one that does not); adoption of appropriate security measures and compliance with them; staff interpersonal skills; and the image of staff and programs. On the basis of the assessment, develop a security strategy and plan—a set of standard operating procedures, contingency plans, and information. Make sure that all staff know and understand its contents. Implement the plan to reduce vulnerability and promote effectiveness of security measures (Dworken, undated).

Many measures may be taken to decrease vulnerability involving vehicle, property, and personal security (including families of staff if appropriate); preparing for and responding to emergencies including attacks, abduction, and evacuation; and the danger of land mines. More detail is outside the scope of this guide, but more specific and relevant guidance has been developed (primarily for international humanitarian relief organizations) in Cutts and Dingle (1998), Dworken (undated), and Rogers and Sytsma (1998).

Staff need to be made aware of emergency plans. Knowing and understanding the contents of an emergency plan is not enough, though—staff should find the plan acceptable and should make sure they can implement it properly. Moreover, staff should also be given the chance to dissent, and leave if they wish. They should not be forced to accept the consequences of staying.

Ensure financial, logistical, and morale-boosting support.

During crises, staff of both projects and protected-area authorities work under great pressure and need as much support as possible. Ensuring regular payment of salaries is extremely important, however difficult this may be. In Rwanda, one of the main reasons protected-area staff continued to work despite risk to their lives was because they believed they would continue to receive their salaries regularly. Endeavors by senior staff to send funds provided concrete proof of continued support (Plumptre *et al.* 2001). Staff salaries often support extended families and sometimes the economy of an area, so they are very important not only to the individual staff members, but also to whole communities in rural areas (see Box 2.6).

Box 2.6 Socio-economic dimension of staff salaries in eastern DRC's World Heritage Sites

In the five World Heritage Sites in eastern DRC, ICCN and its partners employ about 1,000 people. Assuming that each employee supports 10-15 other people in an extended family, this means that international conservation funding is supporting between 10,000 and 15,000 people. This statistic is one of great socio-economic importance. During hard times, when financial opportunities are very limited, these salaries represent a considerable contribution to a region's economy.

Source: Wabbes Candotti (2000).

Provide logistical support as much as possible (communication and transfer of funds are covered in the next section). Recognize that staff are working under tough conditions, and provide bonuses and other incentives, where deserved, to maintain morale.

Help employees stay healthy.

Make sure that employees understand the health risks in the area where they are working, know how to protect themselves from illness and injury, and know how to obtain treatment. This includes the risk of contracting HIV, which may become higher during times of conflict if there are mass movements of troops or displaced people (Kristoffersson 2000 and section 1.2.6). Employees should know how to recognize and manage stress. First-aid equipment should be available, and employees should be trained to use it. Provide medical insurance coverage for employees.

Recruit appropriate and experienced staff for conflict situations.

If there are opportunities for new recruitment, employ people who are likely to perform well in conflict situations. For example, seek out people with good leadership and communication skills, who keep their heads in an emergency and handle stress well. The CAR case study stresses the value of experienced people who have worked in conflict situations before (Blom and Yamindou 2001). Adaptability and broad skills sets are also useful attributes.

Recruit local staff.

NGO and donor strategy should emphasize building and strengthening indigenous organizations and authorities that are staffed with nationals, as opposed to relying on expatriates in key roles. Local staff members are much more likely to stay when situations destabilize (Agi Kiss, pers. comm.). An appropriate role for most expatriate experts is training local staff, for example.

For more information:

Blom and Yamindou (2001), Cutts and Dingle (1998), Dworken (undated), Plumptre *et al.* (2001), and Rogers and Sytsma (1998).

2.1.4 Communication

Who is this for?

Government departments, NGOs, projects, donors.

What is the issue?

While communication can be very challenging during conflict, it is essential to ensure reliable communications to keep staff safe and to continue operations.

Why is it important?

In conflict situations, staff can become very isolated. Senior and expatriate staff may be evacuated, leaving a small number of local staff behind. Normal communications channels, such as national telephone systems, may break down, and physical access to the rest of the country may be blocked. For security measures to work smoothly, effective, reliable, and practical communications systems are essential. These systems enhance staff safety because they facilitate reliable transmission of information and notifications, allow constant monitoring of activities in remote sites, warn about deteriorating conditions, and enable contact between staff members during a crisis. Communications systems also help reduce the sense of isolation during a crisis, and help maintain staff morale.

Communications support comprises two main categories: having the hardware to ensure that communication can take place, and having the procedures and protocols in place to ensure that a two-way flow of information occurs, both within and between organizations. Communication about programmatic issues is covered separately in Section 2.3 on Collaboration.

How to address it?

Install appropriate hardware for emergency communication.

The type of hardware will depend on communication needs and the particular situation. Possible systems include:

- short-wave radio for medium- to long-range communication
- VHF radio for short-range communication
- satellite communications for direct-dial voice, fax, data, and telex communications to and from international public telecommunications networks.

Systems that use solar power can be useful because they remain unaffected by such problems as power cuts and sabotage to generators. Note that the use of communications equipment is subject to national and international regulations. When assessing the best system for a particular situation, examine possible vulnerabilities in the

system (e.g., radio masts in locations where it may be difficult to protect them). Make sure that the system is properly maintained, and remember to keep batteries charged. Whenever possible, have a back-up system in place, as well as spare parts.

In addition, it is important to remember that communications items, such as short-wave radios, are great spoils of war, and should be discreetly located. Radios, solar panels, and batteries are likely to be looted. Moreover, invading armies are very sensitive about communications that they do not control. Finally, it is important that communications equipment not be placed under the control of only one person, and that people who can fix broken equipment are readily available (Valerie Hickey, pers. comm.).

Cutts and Dingle (1998) and Rogers and Sytsma (1998) provide further technical details on communication hardware.

Develop plans and procedures for communication.
Develop plans and procedures for communication during crises, and make sure that everyone concerned fully understands them beforehand. This includes communication within the organization—for example, among field sites (see Box 2.12 in Section 2.2.1, below); between field sites and the national office; and, for international organizations, between national offices and headquarters. Include communication with other organizations, such as other conservation organizations working in the same area, government agencies, relief and development organizations, and UN networks and embassies, in the plan as well. Other organizations may acquire different types of information that can be important for the security of conservation staff. Communication with the military is also important, though it is important to realize that the "military" does not always exist as one entity, and may not always be easy to communicate with; see Section 2.2.5 for more details. Training in communication skills is covered under training, below.

Ensure that commitments to communication are met. For example, be on the air at predetermined times. Missing a radio time may put someone's life at risk. Be aware of the level of security of a communication channel; others may be listening in on radio communications. Where appropriate, develop pre-arranged codes for evacuation and other critical messages (see Box 2.7).

Box 2.7 Pre-arranged communication codes

During the independence war in the early 1970s, professional safari hunters in parts of Mozambique found themselves operating under increasingly insecure circumstances. A critical radio communication deployed a pre-arranged code to warn one safari camp about a "black-maned lion," enabling the occupants to escape by air just before an attack was launched on them.

Source: Virgílio Garcia, pers. comm.

For more information:

Cutts and Dingle (1998) and Rogers and Sytsma (1998).

2.1.5 Training for times of conflict

Who is this for?

NGOs, government natural resource and environment departments, and projects.

What is the issue?

Conservation staff often require additional training to help them work effectively in conflict situations.

Why is it important?

In order to cope during times of crisis, conservation staff need very different skills from those they apply in their normal peacetime work. Crisis situations vary tremendously, but often staff become more isolated and take on more responsibility (whether in the field or headquarters). They must become more self-reliant, street-wise or bush-wise, and must make decisions they would normally refer to supervisors or headquarters. They may find themselves negotiating to protect project property from looters, or natural resources from displaced people, commercial interests, or military personnel. Often, staff will also have to demonstrate their neutrality. It is likely that they will have to collaborate with sectors they have not worked with previously, and which have very different objectives. They may have to lead their colleagues through tough times.

For this, staff members need new technical, communication, administrative, and managerial skills. If they do a good job during conflict, they can often save previous investments and have a large conservation impact. In order to prepare staff for such an eventuality, organizations should provide skills training in a number of key areas.

Senior and expatriate staff are likely to find themselves faced with these new responsibilities at the onset of conflict, and therefore require training beforehand to prepare for this eventuality. However, during conflict, those same staff members sometimes become targets because of their ethnic affiliation, resources they control, or because they are perceived as authority figures—so much so that they may be forced to leave. At this time, it falls to junior staff to maintain the organization's presence. Thus it is very important to include junior staff in training programs as well (Plumptre *et al.* 2001).

How to address it?

Assess training needs and undertake required training.

Undertake a training needs assessment as part of contingency planning (see Section 2.1.1). Provide training in practical fields. Senior and junior staff should be provided with training already identified in the training needs assessment. If training is provided prior to conflict, it may be possible for staff to put some of this training into practice immediately to gain experience—for example, learning to manage smaller teams and their funding, through decentralization of the management system.

The following is a list of areas where training may be needed:

- leadership skills
- conflict resolution and negotiating skills
- crisis management
- communication skills
- hardware communication, including radio/satellite phone communications
- first aid
- personnel management
- financial management
- paramilitary training for conservation protection.

This list is not exhaustive and should be modified depending on specific needs. Advice should be sought from experts who know the organization and its capacity, and who have experience dealing with conflict situations first-hand. NGO responses during the 1996-1997 mutinies in Bangui, CAR highlighted the importance of maintaining experienced staff during crises (Blom and Yamindou 2001). The paramilitary anti-poaching training that guards received from local army units in Garamba National Park in what was then Zaire protected them, the park, and the project when rioting, looting, and harassment broke out in the lead up to the war, because the military respected the well-trained and well-armed park staff (Kes Hillman Smith, pers. comm.).

Make sure that staff understand and believe in the organization's mission.

Staff need to understand and believe in the mission and objectives of an organization, in order to be committed and to do their jobs well. In conflict situations, much more than usual will be demanded of them. Their commitment will be tested to the full. Make sure that they understand the mission and objectives of the organization. Try to absorb them in the organizational culture in the course of their work, and help them understand how they are contributing to achieving the mission even if their work is not directly related to it (this includes administrative and logistics staff). Keep them informed about the organization's achievements. Provide them with basic technical understanding of the organization's work and its broader context. This may be done informally or by holding further formal training sessions.

For more information:

Blom and Yamindou (2001); Hart and Mwinyihali (2001); Hatton *et al.* (2001); Jacobs and Schloeder (2001); Kalpers (2001a and 2001b); Plumptre *et al.* (2001); Squire (2001).

2.1.6 Training for peacetime

Who is this for?

NGOs, government natural resource and environment departments and projects, donors.

What is the issue?

When peace comes, it is likely that an organization will require a whole new set of skills in order to contribute to rehabilitation of the environment or natural resource sector, and to national reconstruction and long-term development that hopefully will contribute to prolonged political stability.

Why is it important?

Training for peacetime is important for:

- Maintaining organizational capacity to cope with the transition to peace and the reconstruction phase, and
- Developing new skills and capacity that will be needed at these times.

Long-term conflict can block a whole new generation of conservationists from being trained. This occurred in Liberia, Angola, and Mozambique (Simon Anstey, pers. comm. and Box 2.8). When a long war finally ends, only a small number of experienced older people remain, whose numbers continue to decline through attrition and retirement. Training a critical mass of new people after conflict and getting them experience is costly and time-consuming, and results in loss of the natural resource and biodiversity base due to low organizational capacity while it is occurring. It is therefore vital to ensure that staff recruitment and training continue during wartime, even if local and national training institutions have closed.

Conflicts of long duration can provide organizations with an opportunity to plan and develop this skills base. In cases where staff have had to flee, alternative training or job experience can better prepare them for future responsibilities. This includes short- and long-term training opportunities, and should be considered for both junior and

Box 2.8 Training needs and conflict: the case of Mozambique

Mozambique's Wildlife Service was already short-staffed before the post-independence war because many Portuguese staff left at independence in 1975 and had not yet been replaced by trained Mozambicans. The Wildlife Service established a Portuguese-language Wildlife Training School in Gorongosa National Park for wardens and rangers. It trained Mozambicans and a few Angolans, with support from the Swedish International Development Agency (SIDA). The school operated in Gorongosa from 1977 until 1981, when RENAMO (Mozambican National Resistance) forces attacked the park headquarters. Captives were taken, including two expatriate lecturers; other staff and students fled. The school relocated to Maputo Special Reserve in the south of the country and continued there for a few more years until the deteriorating situation forced it to close.

In 1993, a review was made of remaining wildlife personnel. Of the 28 Mozambicans trained in the school at considerable cost and effort, only 16 remained in the service at the end of the conflict. Three died during the conflict, two died in work-related accidents, and seven chose to leave the service in search of better conditions.

At the same time, the biology faculty of the University Eduardo Mondlane in Maputo closed during part of the war due to shortages of staff and students. Graduates of the university's veterinary faculty were recruited as senior staff of the Wildlife Service, but they gained little experience of field wildlife work in Mozambique. Only one member of the Wildlife Service staff undertook a bachelor's course overseas. GTZ funded some personnel to train at the East African Wildlife College at Mweka, Tanzania during the war; they are now wardens.

In hindsight, one of the best investments donors could have made during the war would have been to provide university training outside Mozambique for perhaps 12 future senior-level wildlife staff and 20 warden-level staff, teaching them the skills to rehabilitate, improve, and run the wildlife sector. Such a group of staff would have been in a good position to develop a strong and viable conservation sector. Currently, the continued shortage of trained personnel places a heavy burden on those Mozambicans who are trying to build the sector. There is a continued reliance on expatriate staff, yet recruitment is difficult, as they need to be able to work in Portuguese.

Source: Hatton *et al.* (2001).

senior staff. It is also a way of maintaining staff morale and interest, and helps to prevent erosion of the skills base through staff losses (e.g., brain drain of senior staff to other countries).

Note that some of this training can also be done after a conflict ends. Once the new regime is clearly understood and groups are able to assess the skills that may be needed in the long term, gaps can be filled in. But don't procrastinate. Training should not be entirely postponed until the war ends, because it will leave the organization without adequate staff in the critical immediate post-war period.

How to address it?

Assess training needs.

Make an assessment of skills the organization is likely to need after the war. Solicit

advice from others who have been through this type of situation. Perform the assessment not only on an individual organization basis, but also at the national level. Broad skill areas to consider include:

- rehabilitating protected areas
- reforming policy, and implementing new policies
- developing new legislation
- raising funds
- managing an NGO (for NGOs)
- finding new approaches to conservation, including multi-disciplinary approaches (see also post-war policy changes)
- working with the private sector
- improving communication skills
- improving organizational, personnel, and financial management skills
- improving conservation law enforcement
- monitoring.

In addition, organizations will need to decide whether existing staff can undergo training, or whether recruitment will be necessary.

Identify the most appropriate training options.

Depending on circumstances, training can include:

- Professional placements. Staff can gain experience working in another area of their country, if accessible, or outside the country. This can be very valuable since conflict areas are often inaccessible for field staff. Regional organizations, such as the Southern African Development Community (SADC), could promote relevant training in other countries in the region (Simon Anstey, pers. comm.).
- Study tours to other countries so staff can see current developments there, and keep up with advances not currently possible in their country.
- University degrees, and diploma and certificate courses, for example at national or regional training colleges, if conflict seems likely to last a long time.
- Short courses in-country or outside (if conflict looks as though it will soon be over; if conflict continues, it may be possible to arrange a series of short courses).
- Distance learning courses (compatible with maintaining a presence, and very useful for staff who are on site but restricted in activities).
- Field training in effective law enforcement. As described in the Introduction, armed conflicts often lead to overexploitation of wildlife and mineral resources, flouting of laws, and a proliferation of arms and ammunition. In the lingering aftermath, protected-area staff may come under even greater pressure than before, as seen in the Okapi Faunal Reserve in DRC (Kes Hillman Smith, pers. comm.).

Identify who should be trained and how training will be funded.

Identifying who should be trained may be clear for an NGO or individual government

department. However, for a country split by civil war, it is important to consider using frankly pragmatic criteria to choose whom to train. Balance political interests when choosing staff for training, to minimize the risks that part of the country will be undertrained or, if the opposition comes to power, that the new government may be undertrained.

If a national-level training program is planned, in order to maintain neutrality, it could be funded through a training scholarship/skills-training fund, via an NGO, a UN agency, or a regional structure. This would enhance donor confidence that the funds will be used wisely.

Conservation organizations may be able to recruit demobilized soldiers after conflict, for example, to work in law enforcement in protected areas (see Section 2.2.5). Former soldiers can make a valuable contribution because of their ability to live in the bush, track well, and handle firearms. They are likely to need training in such aspects as conservation concepts and relevant legislation.

For more information:

Hatton *et al.* (2001).

2.1.7 Need for organizational and programmatic flexibility

Who is this for?

NGOs from all sectors, governments, and donors.

What is the issue?

Armed conflict can drastically alter the context in which organizations operate, presenting new challenges and needs, yet occasionally presenting opportunities. Organizations therefore need to develop new and flexible strategies to adapt to these circumstances and to continue to function effectively.

Why is it important?

During times of conflict and insecurity, activities that were planned in peacetime may become difficult or even impossible to implement. Programs can suddenly become irrelevant or inappropriate. In such chaotic times, it becomes critical to have the organizational and programmatic flexibility to adapt to a changing context, and to address needs as they arise.

As circumstances change during conflict, organizations need to refocus on a new set of short-term activities. Very often, these activities will need to place a greater emphasis on the links between natural resources and livelihoods. At the same time, while organizations are refocusing, they should take care not to lose sight of long-term conservation and resource-management goals.

How to address it?

Programs need to invest in organizational capacity in order to improve effectiveness during periods of conflict or instability. Here are a number of useful strategies:

Be prepared to adapt and to adjust planning procedures.

Recognize that some planned activities cannot be implemented under the changed circumstances. Be realistic about what is feasible. Be ready to put some activities on hold or drop them completely. Perhaps other objectives remain possible. Be imaginative. Working toward the same long-term goals may involve a temporary change of direction in activities for the organization. Planning procedures should be intensified. Monitor all activities frequently; then use the results to review progress and assess what changes are needed (Section 2.1.1). Develop contingency plans, employing an approach that relies more on operating guidelines, contingency analysis, and flexibility in tactics.

Strengthen the capacity of local staff and field offices.

Strengthen capacity to increase self-reliance. Decentralize responsibility so staff feel confident in their autonomy, and can act without orders from elsewhere during times of instability.

Engage in joint planning with relief and development organizations.

The conservation community can learn much from the relief and development sectors. Such joint planning can reduce duplication of efforts among groups, as well as gaps in the services they try to provide (Kalpers 2001b).

Integrate humanitarian concerns into programming.

Integrate humanitarian concerns when appropriate. This includes integrating both relief concerns of an immediate nature (i.e., survival needs), as well as longer-term development concerns (i.e., economic well-being, health, and agriculture). During the recent armed conflicts in the Virungas, for example, IGCP used funds originally earmarked for tree nurseries to support groups from local communities to manage garden plots. In addition, IGCP works with surrounding communities to use revenues generated from ecotourism to fund local development projects (Lanjouw *et al.* 2001).

For more information:

Kalpers (2001a); Lanjouw *et al.* (2001); and Lanjouw (in press).

2.1.8 Maintaining neutrality

Who is this for?

Conservation NGOs, government conservation departments, and projects.

What is the issue?

Maintaining neutrality is extremely important in order to operate most effectively during times of armed conflict. This can be very difficult, and indeed, in some circumstances, it may be impossible. Nevertheless, wherever feasible, neutrality needs to be actively demonstrated to gain trust and to avoid politicizing the conservation message.

Why is it important?

If conservation organizations are to maintain the trust of various authorities and the working relationships on which they depend, conservation staff must actively demonstrate their neutrality. It is also important to maintain a neutral stance, because if conservation organizations are perceived as taking sides and their message becomes politicized, there may be retaliation against practitioners and their work. Box 2.10 shows an example where NGOs managed to remain neutral.

Neutrality cannot be taken for granted. It is important to try to foresee potential neutrality issues. NGOs and foreigners can be used as pawns in conflicts to further the interests of either side. NGOs that are only able to operate in areas held by one side in the conflict because of security and accessibility reasons may not appear impartial. The focus of conservation organizations on certain communities (for instance, those living around protected areas) or on government institutions (for instance, protected-area authorities) can also be perceived as lacking in neutrality.

In practice, maintaining neutrality may be difficult. It may require continuous efforts to establish relationships with shifting power bases and negotiate with them. Staying

Box 2.9 Neutral status for protected areas during conflict

IGCP and the UNESCO/UNF/DRC program have approached the Environmental Law Commission in Bonn to investigate the potential for defining a purely neutral mandate and legally defining and applying "neutral status" to people working for protected-area authorities and the parks themselves during times of conflict. Such status could be a tool to help people continue to work in protected areas in situations of armed conflict. The usefulness of such a tool, however, would still rely on the political willingness to recognize it.

Source: Lanjouw (in press) and Kes Hillman Smith, pers. comm.

neutral will also be very difficult if partner communities and conservation sites themselves are directly threatened by those interested only in resource extraction. According to relief workers accustomed to operating in the most difficult of circumstances, neutrality is often not possible because armed groups that occupy a territory may consider themselves the only legitimate authority and may regard any communication whatsoever with their rivals as a threat to their legitimacy, or as a betrayal.

How to address it?

Demonstrate neutrality.

Neutrality can be demonstrated when an organization's agenda and activities remain open and transparent; when the organization is inclusive rather than exclusive; and when it actively cultivates relationships and builds trust with the different actors in a conflict situation, while remaining diplomatic and advocating conservation objectives. It is also important for conservation workers to emphasize the importance of conservation to the future of the country and to instill a sense of pride in doing conservation work. That attitude in itself may provide the basis for higher levels of support. Finally, "internationalizing" the focus of activities, by emphasizing that protected areas have an international status and prestige above their national status, can be very effective in gaining recognized neutrality (see Box 2.10).

Stick to a mandate.

International conservation NGOs must often support and collaborate with local authorities (such as protected-area authorities) in order to fulfill their mandate. It

Box 2.10 Remaining neutral

In DRC, remaining strictly neutral has enabled conservation NGOs to maintain communications with sites inside rebel-held territories while continuing to work with the government conservation department. Because of the trust conservation groups carefully established, they also played an important role in relaying conservation information, at government request. They accomplished all this by working together, by maintaining contact with all government and rebel groups through official meetings and other forms of communication, and by "internationalizing" their work—that is, by emphasizing the international status of parks above their national status. The strength of these NGOs lies in their collaboration.

The UNESCO/UNF and partners program for DRC established a coordination unit in a neutral country (Kenya) where representatives of World Heritage Sites from all parts of DRC could meet together. The coordinating unit also could forward and maintain communications among all sites. A diplomatic mission at the start of the program visited all the different regions in the conflict to explain the program and to emphasize the neutrality of conservation and the need to respect, and not suspect, the work of conservation personnel. The UNESCO project facilitated a tripartite meeting in November 2000 to promote dialogue and collegial decisions on conservation strategy among heads of the wildlife organizations from each of the three political regions—an early Inter-Congolese Dialogue set up specifically for conservation and to reinforce neutrality.

Sources: Terese Hart, pers. comm.; Kes Hillman Smith, pers. comm.

should be emphasized to all sides that this is not a partisan approach. Such operations exist at the same level as those of humanitarian NGOs that collaborate with local authorities in their sector (such as ministries for local administration and health) without compromising their political neutrality. Conservation in crisis situations can and should function along the same lines.

But above all, remember the importance of being wise, careful, and diplomatic. Each situation is different and needs to be carefully thought through.

2.2 Collaboration

Shifting needs and priorities during times of armed conflict force organizations of all kinds to adopt a broader approach. For the conservation sector, this often involves focusing more on the link between the environment and human livelihoods and broadening the scope of its activities and partners. Although the core mission and long-term goals of organizations remain the same, their short-term activities are likely to change substantially, and they may find themselves lacking some of the skills and expertise they need. Partnering with organizations from other sectors (e.g., relief and development) can be an effective way to achieve conservation goals while also meeting the range of needs imposed by armed conflict.

Working with partners from different sectors involves finding common ground and identifying win-win opportunities. Organizations may have to learn different concepts and a new technical vocabulary, and learn to see the situation from the viewpoint of others. They should be ready to adapt in order to accommodate the objectives of others within their programs, as long as this does not compromise their own objectives. Mutual learning among all actors and resolution of conflicting interests is very important. At the same time, all actors must recognize there is no single optimum or correct approach, and that there will be both opportunities and obstacles along the way.

Collaboration can take many forms, including collaboration among organizations within the conservation and natural resource sector, as well as collaboration with other technical sectors, such as relief, planning, development, and the democracy and governance sectors. Collaboration across institutional sectors is also important, and could embrace NGOs, government institutions, communities, donors, private-sector groups, and the military and other armed groups.

Collaboration can help mitigate the negative impacts of certain interventions, for example, from the military (mostly during conflict) and relief operations (mostly during and immediately after conflict). By working with these entities, it may be possible to

raise awareness of the potentially harmful effects of their actions. By contributing environmental knowledge and techniques, it may then be possible to work out mutually beneficial ways of reducing damaging impacts.

Collaboration can have other benefits as well. For conservation organizations working in isolation in conflict situations, collaboration and mutual support can become very important on many levels—psychologically, technically, financially, and logistically. Exchanging information about changing circumstances is important for security and for developing and updating a response strategy to the conflict. The wider the range of collaborators, at many different levels, the better the information on which to base crucial decisions.

A few general points about collaboration:

- It is easier to collaborate if relationships with other stakeholders have been established prior to the conflict situation.
- It takes time to establish collaborative relationships, and it is easier if people come together regularly.
- Conservation organizations that already work at a broad landscape level are likely to have a wider range of contacts and collaborators than organizations that only work at protected-area level.
- Collaboration can produce better solutions than adversarial processes.
- Although the benefits of improved collaboration during and following times of armed conflict are clear, conflict can also inhibit collaboration—and create disincentives to collaborate. For example, increased competition for funding may be a strong disincentive for collaboration.
- The more remote the area, the more likely it is that collaboration will rapidly be developed with others working in the area, because there is inevitably a greater need to rely on and trust each other under such circumstances.

The types of collaboration covered in this section include:

- Collaboration within the conservation sector
- Collaboration with and between government authorities
- Collaboration with relief and development sectors
- Community partnerships
- Interactions with the military and other armed groups
- Working with advocacy organizations
- Transboundary collaboration.

Good facilitation can help promote collaboration. Conservation organizations may often be in a good position to facilitate collaboration. They may also seek a neutral third party to help facilitate their collaboration with others. Box 2.11 outlines facilitation work to tackle land and resettlement issues in Burundi.

Box 2.11 Identifying the capacity of legislation and government to address land-based conflicts of interest—Search for Common Ground in Burundi

In the war-torn central African country of Burundi, at least 500,000 refugees located just across the border in Tanzania are being prepared for potentially imminent repatriation. Anticipating this event, a group of national civil society members and international NGOs came together to identify potential conflicts of interest pertaining to land use, resettlement, and conservation. Building on work done by the NGO Africare to translate the Burundian Land Rights Code, the conflict resolution NGO Search for Common Ground organized a panel composed of representatives of three interest groups—refugees, conservationists, and large-scale agricultural producers—to stimulate discussion of the Land Rights Code and to study a government inventory of available land to reconcile potential conflicts of interest that may emerge as refugees return to their homeland.

This unprecedented meeting achieved a number of important discoveries. First, the participants discovered that the government inventory had erroneously counted as "available" for occupation by refugees all public lands *(terres domaniales)* not currently used or occupied, including the national parks. Meanwhile, lands used or occupied illegally had been counted as not available. It was also discovered that the Land Rights Code and the Forest Code are contradictory, and that authority to release parkland for other uses resides at several governmental levels. Refugee participants indicated that the legislation and inventory appeared to favor a resettlement plan similar to the *imidugudu* in Rwanda. Finally, while the Land Rights Code provides for sanctions against illegal occupation and use of land, the inventory's failure to count such lands as "available" appeared to favor current illegal occupants.

The participants and organizers of this round table contributed to radio programs presenting these issues to the Burundian public, and submitted recommendations to important national and international actors, hoping to favor an outcome that takes all interests, including conservation, into account.

Source: Louis Putzel, pers. comm.

2.2.1 Collaboration within the conservation sector

Who is this for?

Conservation NGOs, government conservation authorities, and conservation donors.

What is the issue?

Collaboration within the conservation sector is particularly important during and following times of conflict, when a united front helps to strengthen conservation efforts and promotes efficiency in the sector.

Why is it important?

During armed conflict, collaboration within the conservation sector can increase effectiveness at achieving conservation goals because it reduces competition and mistrust,

shares information and expertise, and allows scarce resources to be used more efficiently. When conservation workers share information about emerging threats to natural resources, biodiversity, and the environment, it becomes much easier to develop a joint response, one that is often more effective than a response from a single organization acting alone.

Organizations that collaborate may find many advantages: they may be able to streamline their programs and ensure compatible approaches; use funds more efficiently; expand their geographical coverage; and, as they discover how their staffers' skills and goals complement each other, share responsibilities, expertise, equipment, information, logistics, and contacts. And also, very importantly, by collaborating conservation groups will find strength in numbers.

Within the conservation sector, collaboration is important among government natural resource and environment authorities, and among conservation NGOs (international or national), as well as between conservation NGOs and their government partners. Government conservation authorities and NGOs can play important complementary roles in conflict situations. Government authorities may, for example, have earlier access to information about threats to biodiversity. NGOs may be able to play a stronger advocacy role.

During and immediately after conflict, government conservation authorities often have low capacity due to lack of funding, loss of staff, outdated equipment, or poor communications access. Moreover, the influence of government conservation departments is often very limited during conflict, because conservation is often relegated to a very low priority. Collaboration between government authorities and NGOs can help to build capacity and provide technical assistance to government authorities. (Note the warnings about collaborating with government in Section 2.2.2, which may also apply here in some cases.)

Note that collaboration during conflict may be more difficult if relationships have not already been established prior to the conflict period, particularly if competition and mistrust existed previously.

How to address it?

Open up lines of communication.

Develop effective networking and collaboration through appropriate forums to update organizations about one another's activities, exchange information, and explore opportunities for collaboration. Ideally, this should begin during peacetime. Where possible, the network should involve the entire conservation sector, including government, NGOs, and donors, as well as other groups if their work is relevant to conservation—community-based organizations, academics, and the private sector.

During conflict, build on these relationships. Seek new opportunities for synergism and collaboration. Even if such forums do not exist before conflict, it is never too late to create them.

Establish joint program activities.

Creating joint program activities with other conservation organizations is an important way to establish longer-term collaborative relationships. Use collaborative planning activities to define the roles of each partner. Encourage both formal and informal contacts between staff—an important way to establish rapport and trust and to strengthen the collaboration. The UNESCO/UNF/DRC project enabled government agencies, conservation NGOs, and the ICCN to create a formal network for communicating and collaborating among the five World Heritage Sites in DRC (see Box 2.12).

Build capacity in partners.

Strong partners can help to build capacity in other organizations, which in turn may play a more effective role during conflict, or during the transition time to peace and rehabilitation. It is especially important to maintain and build capacity in government conservation authorities and in local NGOs that are likely to stay, even if international NGOs are forced to pull out during conflict. Similarly, it is very important to build capacity in national staff since expatriates may have to leave.

Box 2.12 Improved communication among conservation sites in eastern DRC

The UNF/UNESCO/DRC project to support World Heritage Sites endangered by armed conflict was developed and inspired by collaboration between different NGOs and agencies supporting conservation in DRC, as well as with the DRC National Parks administration (Institut Congolais pour la Conservation de la Nature, ICCN). The grant was intentionally written to promote continued collaboration. It set up a structure within each of the World Heritage Sites, the Comité de Coordination de Site (CoCoSi), that included the local parks administration as well as representatives of all contributing conservation NGOs. Each CoCoSi reports not only to the park hierarchy but also to an outside coordination unit in Nairobi that assures the exchange of information between sites, between NGOs, and between DRC and UNESCO.

The current collaboration has been built through a series of workshops that included the national staff of ICCN, UNESCO, and the international NGOs or agencies supporting conservation in the five World Heritage Sites of DRC. Collaboration should be further promoted as the UNESCO grant's joint activities develop; these include law enforcement monitoring, biodiversity monitoring, and community relations. In all cases, a national standard is developed, expertise and information are shared between sites, and planning accomplished jointly by the collaborators.

Source: Hart and Mwinyihali (2001).

Strengthen collaboration between the field and headquarters.
Different roles will be played by field offices and headquarters to mitigate impacts, and these efforts must be coordinated. During armed conflict, field and headquarters must maintain good communications to make critical decisions. Home offices must give their field offices strong support—because home offices have greater access to resources that may be brought to bear on the situation and because such support reassures field staff of the organization's commitment.

For more information:

Lanjouw (in press), Margoluis *et al.* (2000), Yaffee and Wondolleck (2000).

2.2.2 Collaboration with and between government authorities

Who is this for?

NGOs, donors, governing authorities, and their conservation agencies.

What is the issue?

During armed conflicts, communication and collaboration with and between government authorities in a country often break down. Yet this is a time when government authorities are likely to be making critical decisions that affect the environment and natural resources. Collaboration is essential in order to reduce adverse environmental impacts.

Why is it important?

Government decisions made at local and national levels during conflict situations can have profound effects on the environment and natural resources. Communications inside government are often weak during wartime. Communication lines between local and central government departments may be cut. Loss of personnel or changes in departmental focus because of the conflict may result in the breakdown of previous inter-departmental collaboration. But this is a time when collaboration within a government is especially important. Environmental groups must ensure that environmental concerns are still voiced during times of conflict. They must go on gathering as much information as possible, so that the best decisions to mitigate or avoid potential harm to the environment may be made. This is a key role for government environment and natural resource departments to play, if they can, at all levels.

NGOs may be able to play a supporting role in strengthening the organizational capacity of their government partners. In some circumstances, they may also be able to facilitate communication between government authorities. While there are potential

benefits from these activities, NGOs need to be aware that if they are not careful to work with all sides, they face the very real risk that their activities may be used as one faction's propaganda tool. Collaboration, in this context, may be interpreted as a sign of loyalty to only one side.

How to address it?

Work with decision makers at different levels of government on conservation issues, emphasizing the importance of natural resources to the country's future.
This is a very important role for government conservation authorities, if they can continue to function effectively. During and immediately following times of conflict, situations can change with startling speed. It is very important to stay aware of developments, to assess their implications for conservation, and to take swift, appropriate action. Conservation NGOs can also play this role. In establishing relations with government authorities, it is important to be aware of whether and how these authorities are held accountable, and to whom, and who is represented. Awareness of these limitations can make it possible to develop more appropriate strategies, and to provide appropriate information that may lead to reforms in governance.

Develop appropriate communication strategies.
Promote regular contacts, explore areas of mutual interest, build communications channels, promote exchanges of information, and develop trust. All this should go forward at both local and national levels. Regular communication will help to keep options open for assistance and collaboration during times of conflict (see Box 2.13).

Box 2.13 Collaboration with government authorities during conflict: the case of ICCN

When the 1996-1997 war began in DRC, long-term technical staff at conservation organizations from different sites developed a program with ICCN and the UN agencies to reinforce the institutional capacities of a government conservation agency, and to improve overall conservation effectiveness. The existence and operation of the program has proven to be extremely valuable and has provided structure to their communication and collaboration. Sharing their information and experiences has greatly increased their effectiveness and enabled them to develop a stronger international voice to raise attention to the threats to these sites.

Communication and collaboration are improved through regular meetings, e-mail, thrice-weekly radio communications with all the eastern DRC sites, joint planning of the program by the Core Group, joint capacity building, monitoring and community-linked activities, and site-based planning by Site Coordination Committees that link all projects and key ICCN personnel for each site. The Coordination Unit handles all of these activities.

Source: Kes Hillman Smith, pers. comm.

In partnerships with government, develop agreements on principles of partnership. Government support for NGOs is crucial to implement conservation initiatives, but the government may expect a quid pro quo—that the NGOs will support its particular political agenda. Negotiation regarding principles of partnership can be used to make these interests explicit. One important principle could require that partners include community stakeholders, a factor that could prove especially important when government legitimacy is questionable.

Facilitate dialogue between authorities and at different levels. NGOs can play an important role as a liaison between authorities during an armed conflict, when authorities in different sectors and at different levels may find it particularly difficult to communicate. For example, regional and site-based government offices may be cut off from headquarters by communications failures; field sites may lose contact when rebels seize the area. By acting as a partner common to all sides, conservation NGOs may be able to facilitate dialogue by interacting with each side individually and promoting shared norms and perspectives.

For more information:

Kalpers (2001a, 2001b); Lanjouw *et al.* (2001); Wabbes Candotti, in Blom *et al.* (2000).

2.2.3. Collaboration with relief and development sectors

Who is this for?

NGOs in environment, relief, and development sectors, United Nations High Commissioner for Refugees (UNHCR), and government conservation, relief, and development agencies.

What is the issue?

The large scale of many humanitarian operations and their urgent timing combine to create a high potential for adverse environmental impacts. During and immediately after armed conflict, environment becomes a lower priority relative to humanitarian concerns, but improved collaboration among environment, relief, and development sectors can often help to avoid or mitigate many of these impacts without hindering essential operations.

Why is it important?

During an emergency, the top priority of the relief sector is to save human lives. Once the crisis is over, displaced people return home. At this point, the development sector

steps in. Urgent humanitarian aid is supplanted by programs to rehabilitate regions and re-establish long-term livelihoods. At the same time, during and immediately after a crisis, the environment and natural resources are vulnerable, for reasons already outlined. Many relief and development operations can have adverse environmental impacts.

Camps for displaced people are one major source of these impacts. Possible harm can arise from many factors, such as siting, camp setup and infrastructure, water and sanitation, food distribution, fuel supplies and cooking arrangements, community services, and agricultural practices. Impacts can include:

- Deforestation of areas surrounding camps for energy and building materials
- Land degradation (e.g., soil erosion, compaction)
- Over-harvesting of natural resources for food and medicine
- Contamination of water resources: sewage, waste
- Depletion of water resources in the area
- Inadequate disposal of solid waste
- Impacts on biodiversity and the larger ecosystem from these impacts
- Creation of tensions between local people and supported refugees.

These impacts can be significantly reduced if relief and development sectors integrate environmental considerations in the planning stages. Environmental damage from humanitarian operations is often far less costly to prevent or mitigate than to repair. Moreover, all parties involved in humanitarian relief and development have a powerful incentive to collaborate in conservation, simply because the livelihoods of local communities and refugees depend on natural resources.

During a crisis, the humanitarian sector often has more resources than the environment sector and may have resources to prevent or mitigate some of the environmental impacts associated with their work. But to help, the humanitarian sector needs information, including the detailed knowledge that local practitioners have of specific areas and techniques, to help it plan.

Relief organizations have many incentives to collaborate:

- Preventing or reducing impacts reduces rehabilitation costs.
- Harming a host country's environment may lead to refusals of asylum for future refugees.
- Declining natural resources cause hardship for refugees.
- Incorporating environmental concerns provides an opportunity to minimize conflicts between refugees and host communities over scarce land and natural resources.
- Reducing impacts on environment and natural resources is more likely to lead to long-term livelihood security of local residents, and hence to long-term peace in the area once the crisis is over.

- Collaborating with environmental organizations takes advantage of their unique understanding of an area's resources to help refugees.
- Collaborating with organizations in the environment sector also takes advantage of their well-established links with local authorities and communities.
- And collaborating with environmental organizations that have long-term commitments in an area can provide a bridge between short-term relief work and longer-term development work once relief groups depart.

The development sector also has incentives to collaborate with environmental organizations, since the livelihood strategies of many rural Africans have complex linkages with natural resources and the environment. Collaboration between the two sectors can promote the wise use of resources and maintain healthy ecological systems as a basis for long-term livelihoods.

Refugees, internally displaced people, and host communities also have incentives to collaborate in reducing environmental impacts because:

- Reducing environmental impacts means the natural resource base will be better able to support displaced populations as well as host communities, since refugees and host communities often share the same natural resources.
- Reducing environmental impacts can also reduce tensions between refugees and host communities and improve relations.

But while there are many good incentives for collaboration with the relief and development sectors, it is important to remember that both these sectors work under considerable pressure and are not always able to take the first steps in seeking collaboration. Conservation staff should actively seek out collaboration opportunities, without waiting for other sectors to approach them.

How to address it?

Find common ground and speak the same language.

Understanding the philosophy and language of the other sectors is important and can also illuminate the constraints within which they operate. Avoid jargon. For example, rather than using the phrase *biodiversity conservation*, consider using *natural resource management*. Ideally, at the same time, the relief community might also modify its language to more directly address the link between natural resources and livelihood concerns. Remember that even at a time when each sector appears to have a very different goal, every sector still has mutual interests and potential synergies. Seek out the common ground, then explore it.

Form cross-sectoral relationships prior to conflict.

It is very hard to establish working relationships during an actual crisis. If possible, build relationships prior to a crisis, as a routine part of doing business, so that

collaborating organizations can develop a common understanding. If a crisis strikes, the various groups then are already familiar with each other's work. Regular meetings and communications can simply continue, becoming more focused against a backdrop of crisis. Recognize, however, that during emergency situations, there may be a higher rate of staff turnover, especially within relief agencies.

Work with other sectors at all organizational levels.
It is important for the environment sector as a whole to collaborate with the relief and development sectors at all levels: from field level to national level, regional level, and international level. The environment sector should develop relationships with relief and development staff in the field where implementation occurs, and also in the headquarters of their organizations, where policy decisions are made. The environment sector should look for appropriate forums to participate in, such as local and national multi-disciplinary planning committees and national NGO forums that bring together different sectors. In the United States, the American Council for Voluntary International Action (InterAction) (http://www.interaction.org), a coalition of US-based non-profit relief, development, environmental, and refugee agencies working worldwide, provides one such important forum.

UNHCR helps to coordinate environmental support activities in different sites around the world (http://www.unhcr.org). A practical example of coordination of refugee camps in Rwanda is given in Box 2.14. Recently, several international meetings have been held to discuss issues of common interest and to promote linkages and networking, including those of the Working Group on Ecology and Development in the Netherlands (Blom *et al.* 2000), the Yale University chapter of the International Society of Tropical Forestry (Price, in press), and the Biodiversity Support Program (findings documented in this publication).

Interact with other sectors in ways they are accustomed to.
In the relief sector in particular, work is often done at the level of personal relationships. Decisions in the field are often made in informal settings rather than around meeting-room tables. In order for the environment sector to participate, staff must develop personal relationships with relief staff and collaborate in the same casual settings, or the environment sector will be left out of critical decisions (Steve Smith, pers. comm.).

Establish clear roles and responsibilities, and designate lead agencies in each sector.
If environmental concerns are to be given sufficient consideration, it is important to have participants who are specifically designated to play this role. A lead agency should be designated to address conservation concerns in relief settings. Although relief organizations may have an incentive to reduce environmental impacts, they often lack the appropriate expertise and, absent a lead agency, there will be poor coordination pertaining to environmental concerns. Lead agencies need a solid funding

Box 2.14 Cross-sector collaboration after the Rwanda crisis

An example of successful cross-sector collaboration took place in the Virunga Volcanoes range following the influx of refugees into eastern Zaire (now DRC) from Rwanda following the 1994 genocide. Within a few days in mid-July 1994, two million refugees crossed the border into Zaire. About 720,000 of them settled in the southern part of the Virunga National Park and remained there for two years. This situation was unavoidable: it would have been logistically impossible to move so many refugees; some were heavily armed and resistant to a move; and there were no local civil authorities to assist and direct humanitarian agencies.

To mitigate rapid deforestation, UNHCR cooperated with implementing agencies to distribute wood to camps from tree plantations. However, this only succeeded in reducing deforestation in places where adequate security existed and where both energy-efficient cook stoves and improved cooking practices had been introduced. In camps where there was less security, enormous amounts of wood harvested within the park were traded commercially in the city of Goma; in some instances, the government conservation agency ICCN lost control of park territory altogether to armed rebels.

Collaboration among ICCN, GTZ, UNHCR, and various NGOs established a pilot environmental unit to gather and disseminate environmental information, demarcate park boundaries with the help of local communities, and conduct environmental rehabilitation after refugees left. ICCN, the one common partner among all the participants, played an important role in facilitating this collaboration.

ICCN was also able to take action in the northeast, where Sudanese refugee camps were sited in buffer reserves surrounding Garamba National Park. Since ICCN has some authority over these areas, it was possible to negotiate the movement of these camps farther away to outside the reserves, and warnings were posted in the camps about the prohibition of poaching (Kes Hillman Smith, pers. comm.).

Source: Kalpers (2001a and 2001b); Kes Hillman Smith, pers. comm.

base as well as technically qualified staff, a commitment to the environment, and the ability to persevere. It is useful to formalize roles and responsibilities in writing to help ensure commitment to the arrangements.

Promote existing environmental guidelines for relief and development sectors, and identify common concerns and areas for potential collaboration.

In recent years, a number of excellent environmental guidelines have been produced by the humanitarian sector for mitigating the environmental impacts of their operations (for example, Lutheran World Federation 1997; UNHCR 1998a). But serious challenges remain. In some cases, these guidelines are not followed or implemented in the field. Field staff in the relief sector may even be unaware of their existence. Furthermore, without training and technical support, relief workers may still give environmental issues a low priority. The rapid turnover of field staff in the relief sector compared to other sectors creates an additional challenge. To help ensure that environmental guidelines are actually adopted, the environmental sector must promote the existing guidelines and create pre-crisis training programs along with the relief sector, as IGCP has done with UNHCR.

Compile and make available environmental information.

The environment sector should compile relevant information and make it readily available to the relief and development sectors as well as to national planners. The types of information will vary from country to country, but could include:

- natural resources of national and local significance;
- biodiversity data, including particularly important plant and animal communities, endemic or rare species, and ecosystems with key functions, such as watersheds and mangroves;
- map coordinates of protected areas and other key areas;
- databases of environmental experts for a country or region, including their specializations and geographical areas of experience.

Often much of this information already exists in-country (for example in National Environment Action Plans and National Biodiversity Strategies, and in government departments and NGOs), but it may not be readily accessible to other sectors in a form that can be used in an emergency. This inaccessibility can be particularly serious if experts from the environment sector have to leave in a hurry. More could be done at the national level to ensure that the information is easily accessible in an appropriate form.

Some environmental information is already easily available on the Internet. The United Nations Environment Programme–World Conservation Monitoring Centre (UNEP–WCMC) maintains databases on species, protected areas, forests, marine and coastal resources, and national biodiversity profiles (http://www.wcmc.org.uk). Many international conservation NGOs such as World Wildlife Fund (WWF), Conservation International (CI), and BirdLife International also have databases on various conservation aspects. UNHCR has maps of refugee movements and some environmental information (http://www.unhcr.org). Green Cross has also developed a database of expertise in the United Kingdom, to which one can apply for information on environmental aspects and experts. For more information, visit their Web site at: http://www.kingston.ac.uk/~xe_s477/gc.htm.

Advocate appropriate siting of refugee camps to the UN and to host governments.

Decisions about siting of refugee camps are normally made by host governments, but it may be possible for environmental organizations to identify options that minimize conflicts between environmental and community concerns and to influence this process. It is essential to use environmental information and expertise to make these decisions. When host communities join the decision process, they may reveal options previously overlooked, and may be more accepting of less destructive alternatives.

Involve local host communities in conservation interventions related to refugee influxes.

Local host communities should be involved in such interventions. They live there, both before and after refugee influxes, and they are the ones who are hit hardest by

any harmful impacts. If conservation organizations are already working with local communities, they may be able to support them in negotiations or facilitate dialogue between the communities and others. A lead agency should be designated to address conservation concerns in relief settings. Although relief organizations may have an incentive to reduce environmental impacts, they often lack the appropriate expertise. Without a lead agency, there may be poor coordination pertaining to environmental concerns. Lead agencies need a solid funding base as well as technically qualified staff, a commitment to the environment, and the ability to persevere.

For more information:

Blom *et al.* (2000); CARE (2001); International Federation of Red Cross and Red Crescent Societies (2001); International Gorilla Conservation Programme (1999); International Organization for Migration (1996); Kalpers (2001a and 2001b); Lanjouw *et al.* (2001); Lutheran World Federation (1997); Sphere Project (1998); UNHCR (1996a, 1996b, 1998a, 1998b, 1998c, 1998d).

2.2.4 Community partnerships

Who is this for?

Conservation NGOs and government authorities.

What is the issue?

In times of conflict, local communities often become more dependent on natural resources for their survival. The conservation sector must often change its approach at this time if it is to achieve its goals, incorporating human livelihood strategies into its programs and adopting a broader, more holistic approach through partnerships with local communities.

Why is it important?

During and following times of armed conflict, economic strategies are often determined by basic survival needs at all levels. Local communities often must rely much more on a wider range of subsistence activities, and natural resources often occupy a larger share of livelihood strategies. This reality forces the conservation sector to take a broader approach to natural resource management, one that prioritizes livelihood security as well as biodiversity conservation. To accomplish this requires the identification of community needs during conflicts, and incorporating these needs into conservation activities.

During crises, it is often necessary to rely on pre-existing good relationships and partnerships. When partnerships between conservation organizations and communities have been established prior to a crisis, they can increase program resilience by creating more options.

Demonstrating an organization's commitment to the welfare of the community builds trust and clout within the community and provides the basis for a long-term collaborative relationship. For example, in the Virungas Environmental Project, tree-planting activities were redirected toward growing vegetable gardens, which provided more immediate benefits and more directly met local needs (Kalpers 2001a).

Natural resource-management initiatives that are developed in collaboration with local communities prior to a conflict and based on local needs are more likely to endure because the community will have a vested interest in them.

As seen in the Ethiopian case study, parks in which there has been prior community participation in management have sometimes been the only ones to survive the periods of lawlessness associated with armed conflict (Jacobs and Schloeder 2001 and Box 2.15).

How to address it?

Be flexible.

Accept that during crises, if agriculture fails and other forms of employment and income stop, people will become more dependent on natural resources. Conservation must adapt to these realities. Organizational and programmatic flexibility in the short term may be necessary to preserve options for long-term conservation activities and to safeguard previous investments.

Adopt a broader approach to conservation.

During times of armed conflict, conservation organizations should take a broader approach to conservation, one that incorporates livelihood concerns and multiple uses and stakeholders. Organizations not already working at landscape level should consider doing this.

Build community capacity to withstand pressures.

During and following times of armed conflict, it is especially important to strengthen community institutions for natural resource management to increase their resiliency. Keep people involved in conservation by taking advantage of opportunities for learning and capacity building as they arise. Work with ex-combatants, youth, local NGOS, local and traditional authorities, and others, building their capacities through education and empowerment, so that, when conflict ends, communities will better be able to resume their pre-war activities.

Box 2.15 Ethiopia's Awash National Park Project

The Awash National Park Project (1990-1993) was undertaken at the request of the Ethiopian Wildlife Conservation Organization (EWCO) to research and develop a new park management plan. EWCO's request for this project followed its acknowledgment that its exclusionary protected-area policy had been ineffective to date, and that it lacked data and ideas to understand how this protected area should be managed. Researchers working on the management plan quickly realized that immediate intervention measures had to be taken if the park was to survive until the project completion date—and if further human injuries and loss of life were to be avoided. Park authorities, it was learned, regularly engaged in armed battles with the Kereyu and Ittu communities while attempting to enforce Ethiopia's exclusionary protected-area policy.

The new measures implemented prior to the completion of the management plan included:

- Organization of meetings between park staff, the Kereyu, and the Ittu to discuss the concerns and issues of each group;
- Negotiation of concessions on the part of all concerned parties (e.g., EWCO, resident pastoralist groups, private and government land owners, and other users);
- Raising awareness in the health, education, and relief sectors regarding local issues and needs;
- Campaigning for the provision of immediate intervention measures from government organizations and other NGO sectors;
- Education of EWCO and protected-area staff in community-based conservation- and protected-area programs;
- Abandoning the practice of using the military to enforce exclusionary protected-area policies; and
- Implementation of a local conservation-education program.

The discussions led to a temporary cease-fire agreement that reduced immediate tensions. This was followed by important concessions allowing the Kereyu and Ittu access to the park's grasslands during drought, under the condition that they were responsible for self-policing. The early recruiting of several government organizations and NGOs (Water Resources Development Institute, OXFAM, GOAL-Ireland, CARE) to provide various services (health, veterinary, technical) also was key, in that it served to illustrate a commitment to resolving the problems of the Kereyu and Ittu. This signaled that EWCO was willing to acknowledge that Ethiopia's protected areas would survive only if they adopted a long-term, community-based approach to conservation. This endorsement led the Kereyu and Ittu to believe that their needs would have as much priority as the park's, and to agree to a cease-fire and self-policing.

Source: Jacobs and Schloeder (2001).

Give communities hope.

Communities often lose the benefits of economic activities from natural resources during conflicts—for instance, ecotourism disappears, taking with it a substantial portion of the economic system. When war came to the Virungas, local communities looked after the gorillas in their areas because they recognized their economic value and hoped that ecotourism would resume after the war (Plumptre *et al.* 2001). It is important to work with local communities and give them hope that after the war such activities will resume and the area will recover.

Gather information outside conflict periods.
It is important to develop as complete an understanding as possible of the local context, and to develop this understanding during peacetime. It is far more difficult to gather such information while a conflict is occurring. Local knowledge becomes particularly important during times of conflict, when human needs are thrust to the foreground. At this time, it becomes essential to provide newly arriving relief and development groups with precise baseline information on local natural-resource-management practices.

For more information:

Jacobs and Schloeder (2001), Maskrey (1989).

2.2.5 Interactions with the military and other armed groups

Who is this for?

NGOs, government environment authorities.

What is the issue?

During times of armed conflict, the military and other armed groups often wield great influence and authority. Interacting with the military may bring benefits, but it also carries significant risks.

Why is it important?

During periods of armed conflict, working with armed groups may provide improved security and capacity for conservation law enforcement. For instance, it may be a way to stop poaching and the laying of land mines and to re-arm park workers, as in DRC in Garamba National Park, Okapi Faunal Reserve, Kahuzi-Biega National Park, and, shortly, Salonga National Park (see Box 2.16). Interacting with military groups also may help conservation sectors establish trust with authorities, and enable them to share information and resources and negotiate for the authorizations needed to continue or re-establish operations. It is often the only way to have training to deal with increased threats to conservation and to enable park personnel to be re-armed after they have been disarmed by invading military. This is the strategy used in all parks in DRC (Kes Hillman Smith, pers. comm.). Interacting with armed groups may also provide a way to promote a conservation ethic among soldiers, and to reach out on other social issues such as the spread of HIV infection (see Section 1.2.6). The work of conservation organizations doing HIV/AIDS outreach among soldiers in the West Caprivi region of Namibia provides one such example (Karine Rousset, pers. comm.).

Box 2.16 Interacting with the military in DRC

As the armed conflict in neighboring Sudan led to increasingly military-trained-and-armed poaching in Garamba National Park along the DRC-Sudan border, two training operations were carried out with local military battalions. These operations had the immediate effect of increasing capacity and reducing poaching in the park, and the long-term effect of engendering a considerable respect among soldiers for the abilities of the ICCN personnel. Later in the conflicts, when armies were rioting, fleeing, looting, and occupying, they did not interfere with park operations.

World Heritage Sites in DRC that had been disarmed and found themselves up against relatively lawless exploitation with widespread military and rebels recognized that the most immediate practical way to improve this situation was to have paramilitary training and reinforcement, linked with re-armament in a controlled fashion with military units. This has occurred in Kahuzi-Biega National Park, parts of the Virungas, and Okapi Faunal Reserve, and will shortly take place in Salonga National Park.

Source: Kes Hillman Smith, pers. comm.

On the other hand, interacting with armed groups often entails risks. Conservation entities may potentially become dependent on an armed group, or lose their autonomy. Armed groups may also begin to harass them. In addition, soldiers may be poorly supported and interested in gaining financially from the agreed support in terms of rations and bonuses for such an operation (Kes Hillman Smith, pers. comm.). Moreover, if conservation sectors interact with one military group, other parties may question their neutrality.

Interacting with the military in times of conflict is always likely to be a challenging situation. It demands careful judgment, based on a comparison of the risks and advantages, as best these can be determined. This form of collaboration should be usually considered a short-term solution at best.

How to address it?

Identify shared interests.

Collaboration with the military and other armed groups will only be feasible when there are shared interests. For example, armed groups may have an interest in collaborating with conservation organizations in order to consolidate their control over an area, and in training park personnel and collaborating with them in order to limit mining and poaching of protected areas by rebel groups (see Box 2.17). Armed groups may also have an interest in the detailed knowledge that conservation personnel may have of an area (Hart and Mwinyihali 2001). From a conservation standpoint, the military can give paramilitary aspects of training to anti-poaching personnel.

Be diplomatic and follow accepted procedures.

This requires recognizing the authority of the military, but also expecting the military

Box 2.17 Interacting with armed services agencies

It is worth noting that armed services branches of many governments have considerable experience with the issue of whether and how to engage with military forces in foreign countries in conflict. In the US military, this specifically includes issues of environmental management. International NGOs and expatriate conservationists may be able to seek advice and possibly even direct assistance from armed services agencies in their own countries. This may help them to be taken seriously by military leaders in the conflict country, and to identify common ground with them.

Source: Agi Kiss, pers. comm.

to recognize the authority of conservation agencies in joint operations. Elements of diplomacy include frequent communication along formal and informal channels, and at different levels, and obtaining clearances and signed agreements from both civil and military authorities for any clearly defined operations. Keep in mind that military personnel may change frequently. Key positions may remain constant, but the people in them may not. It may well be necessary to keep establishing new relationships with those new figures.

Invoke higher authorities and international conventions when necessary.
Although international conventions are difficult to enforce, they can help to establish the importance and neutrality of conservation. It is important to have the support of the highest relevant authority and to use it if things get out of hand at ground level. Additional pressure can be created by informing the international press and appealing to the desire of a country for a good environmental reputation. These activities may not sway military or armed groups. Combatants may be shown, however, that they are the guardians of nature—that protecting the environment is a fulfillment of their political role and legitimizes their position.

Actively demonstrate neutrality.
If an organization aligns itself too closely with either side, the other side may target it. Maintaining relations with one government will only be useful if that government remains in power. Therefore, maintaining relations with any governing authority must be done very carefully to avoid alienating any potential succeeding authority. For more information, see the section on maintaining neutrality, Section 2.1.8.

Consider the relationship between the military and the local community.
Working with the military may jeopardize conservation organizations' relationships with communities. For example, in Ethiopia, a liaison strategy between conservationists and the military may be ill advised, because in the past the military had been used to enforce exclusionary conservation policies and had failed to recognize indigenous rights and human needs (Jacobs and Schloeder 2001).

Define a criterion that can serve as a limit to how much and in what ways "working with the military" is possible.

If a conservation organization is able to work with the military and the local population at the same time, that is an indication that the organization is being neutral and is acting ethically from a humanitarian point of view. But conservation organizations cannot be blind to ethical considerations. For instance, does a conservation organization want to work with armed groups who shoot unarmed civilian members of the local population for trespassing in a park? (Louis Putzel, pers. comm.).

Help to integrate demobilized soldiers into society.

Assimilating large numbers of demobilized soldiers into the workforce and society is a major challenge after conflict. Employment opportunities are often limited, and ex-soldiers may be unwilling to return to subsistence agriculture—if indeed they have access to land. If they do not have land or employment, they may resort to banditry and pose a serious threat to security and fragile post-war stability. They may establish themselves in groups in rural areas and mine natural resources unsustainably (e.g., commercial fish and charcoal production), to the detriment of local communities dependent on those resources for their long-term livelihoods (Hatton *et al.* 2001). The conservation sector should play its part in helping to overcome this problem by hiring demobilized soldiers as appropriate (see Box 2.18).

Engage the military in peacetime.

Building awareness of links between environmental and livelihood concerns among the military during peace gives them time to reconsider their standard operating procedures, and makes it more likely that during crises they will engage in less destructive environmental behavior and support conservation efforts. Explore ways to promote awareness in the military, including incorporation of environmental issues in military training programs.

Box 2.18 Assimilating demobilized soldiers into society and the economy

In Mozambique, a broad effort was made to find gainful employment for demobilized soldiers across a range of sectors, including the conservation sector. Some protected areas recruited ex-combatants as game scouts. They had excellent qualifications: ability to live in the bush, good tracking skills, and familiarity with firearms. Gorongosa National Park created new law enforcement patrol teams, each comprising a Wildlife Service scout team leader with pre-war experience, and demobilized soldiers from both RENAMO and FRELIMO (Mozambique Liberation Front). Special care was taken to ensure that both sides were represented in each team, to avoid any possibility of conflict between teams.

Source: Hatton *et al.* (2001).

For more information:

Kalpers (2001a), Hatton *et al.* (2001)

2.2.6 Working with advocacy organizations

Who is this for?

Consumers, NGOs, national governments, CITES implementing agencies, government monitoring agencies that follow the flow of arms, human rights and humanitarian organizations.

What is the issue?

Since many conservation organizations work at the site level, they often have access to considerable first-hand information about activities on the ground. When arms proliferation and illicit trade networks arise during armed conflicts, conservation organizations can play an important role in efforts to address these problems by providing valuable on-the-ground information to advocacy organizations.

Why is it important?

Advocacy organizations can be highly effective at raising international awareness about the use and misuse of resources and revenues, influencing public opinion and informing policy. While not immediately effective at a local level, such information could be used to increase international pressure on a regime.

It should be recognized, however, that collecting and passing along potentially sensitive information can be dangerous. The risks need to be assessed extremely carefully. People may endanger their lives, or the lives of others, or may jeopardize their ability to return to work in a country if they are suspected of being involved in "name and shame" activities.

How to address it?

Seek to account for resources sold and revenues obtained by governing authorities. Develop a transnational network to obtain and share information about actors engaged in the trade of arms for natural resources and the products they have on the

market. This information can then be used to educate consumers so they may boycott products that support armed conflict. Advocate the development of a system of certification of product origin. Certification efforts to curb the market in conflict diamonds have successfully compelled the world's largest diamond traders to certify their diamonds. Efforts to certify timber and other national resources originating in areas of conflict are also under way (Global Witness 1998; 1999; 2001).

Lobby for monitoring and formal arms sanctions.
Formal arms sanctions provide additional leverage because they create a way to formally engage governing authorities in the process. This makes it possible to hold accountable those engaged in supplying arms who are based in other countries. However, in the absence of a strong base of grassroots support, sanctions are unlikely to occur.

Inform and involve governing authorities.
Regulation of trade is a function of governing authorities, who need to be engaged in any attempt to control illicit trade networks. However, keep in mind that the ultimate power here may be the consumer's. Certification would be impossible without the considerable pressure consumers assert on its behalf.

Hold multinational corporations accountable.
Businesses engaged in resource exploitation may sometimes be the only effective point of leverage, through their vulnerability to public perceptions and consumer power. As much attention should be given to the practices of multinational corporations engaged in resource exploitation as to community and to governing authority stakeholders. It is important to arrive at an understanding of corporations' motivations, perceptions of natural resource management problems, and decision-making processes. An excellent example of this recently occurred when the DLH Group, a Danish multinational company that had been buying Liberian timber, bowed to international pressure to stop dealing with Liberian logging companies implicated by the United Nations in arms trafficking (Integrated Regional Information Network-West Africa 2001).

Enhance communication and consumer awareness.
In order to hold multinational corporations accountable, conservation organizations may need to partner with advocacy groups to leverage knowledge of activities on the ground and develop a transnational network of information about businesses engaged in illegal trading of natural resources and their products. By raising international awareness about these businesses, this information can be used to "name and shame," enabling consumers to choose to avoid products that support conflict. Systems of product-origin certification also are a vital tool of this area of advocacy (www.oneworld.org/globalwitness/).

Adopt a forensic approach to assessing the impacts of armed conflict.
All legal mechanisms, whether derived from the law of war or international environmental law, whether civil or criminal, ultimately require clear and certain evidence

about the responsible actors, their actions, how those actions caused damage, and the extent of the damage. The conservation community in the field must acquire the habit of carefully documenting and preserving concrete evidence that could eventually be used in an investigation or in other legal proceedings. Gather proof on the impacts on wildlife and natural resources, but also, to the safest extent possible, gather proof on the identity of those responsible, the details of their activities, and the extent of their impacts, in economic as well as ecological terms (Jay Austin, pers. comm.).

For more information:

Global Witness (1998; 1999; 2001); Hart and Mwinyihali (2001); Redmond (2001); Squire (2001); UN (2001).

2.2.7 Transboundary collaboration

Who is this for?

Government departments, local and international NGOs.

What is the issue?

Transboundary issues often assume heightened importance during periods of armed conflict, and in some cases, transboundary collaboration may help to mitigate environmental impacts.

Why is it important?

Since border areas tend to be remote and undeveloped, they often contain protected areas, relatively intact vegetation, and high biodiversity, and so are particularly vulnerable to environmental damage. They are also often the location of armed conflicts, including both conflicts between neighboring countries and civil conflicts, since groups opposing the government often establish bases and hold territory in remote border areas.

Transboundary challenges posed by armed conflict include:

- Influxes of refugees crossing borders to escape conflict, with impacts from refugee camps and increased numbers of people in rural communities, and consequent pressure on natural resources and vegetation cover.
- The threat of armed insurgents from the other side of the border, affecting the security of conservation activities and creating the risk of conflict spilling across the border.

- An increase in illegal extraction of a shared resource, or damage to a shared ecosystem on one or both sides of the border.
- The spread of human and animal diseases, as abnormal transborder movements of people and livestock occur, and as human and livestock disease control measures break down. Livestock diseases may also affect wildlife.

Resource extraction is often a serious problem. Poaching can increase with the growing availability of arms and ammunition in the region. For example, when the Sudan People's Liberation Army (SPLA) seized the region across the border from Garamba National Park in 1991, more than 600 weapons and thousands of rounds of ammunition were recovered from military forces fleeing through the park. Many more were never recovered. Since then, meat poaching has demonstrably increased, exacerbated by the long-standing persistence of military camps on the border and refugee camps within the country. National military stationed in border areas to control invasions and border crossings may themselves be the source of much poaching, resource exploitation, and harassment of local people (Kes Hillman Smith, pers. comm.).

In some cases, collaboration between neighboring countries can help to mitigate certain environmental impacts of conflict. The type of collaboration that is feasible depends on circumstances. Sometimes local action is possible on a relatively informal basis, even if more formal collaborative agreements between countries are not possible—for example, between wardens of neighboring protected areas or between neighboring communities (see Box 2.19).

How to address it?

The following strategies may be relevant for organizations working in countries affected by conflict or in neighboring countries.

Develop a basis for communication and collaboration across the border.

A neighboring country may be able to provide valuable assistance at critical times during and after conflict. This is more likely to happen if communication is already occurring. During peacetime, promote contacts across the border. Explore areas of mutual interest, develop communications channels, exchange information, build trust, and consider the benefits of collaboration. This should occur at local and national levels. Even if no active collaboration occurs during peacetime, this will help to keep options open for assistance and collaboration during times of conflict.

Monitor the security situation on both sides of the border.

Obtain up-to-date information on security through these communication networks, at both local and national levels.

Box 2.19 Transboundary conservation in the Virunga Volcanoes

A very successful example of transboundary collaboration during armed conflict is in the Virungas, where montane forests in three adjacent protected areas in Rwanda, Uganda, and DRC are home to the endangered mountain gorilla. The gorilla population ranges freely across the borders of the three countries. In the 1980s, protected-area authorities started collaborating on gorilla conservation and tourism development on an ad hoc basis. The International Gorilla Conservation Programme (IGCP) was created in 1991, as conditions began to deteriorate.

IGCP still works very closely with the three protected-area authorities, aiming to strengthen their capacity to conserve the forests and gorillas in the face of ongoing threats (poaching, deforestation, and agricultural encroachment), and to promote a framework for regional collaboration.

During the past decade the forests have seen much fighting at various stages of the complex conflict. Several times, park authorities in Rwanda and DRC were forced to withdraw from all or part of the parks. In 1994, refugee camps were established on the border of Virunga National Park in DRC, causing serious deforestation in the vicinity. More recently, when DRC government forces were fighting against troops in the east backed by Rwanda and Uganda (described in more detail in Lanjouw *et al.* 2001), ICCN, DRC's wildlife authority based in Kinshasa, was unable to support its staff in the Virungas in the east. IGCP stepped in to provide this support, and helped to facilitate collaboration among the staff of the three protected areas. Remarkably, this collaboration continued, at the local level and the wildlife authority headquarters level, despite the political situation.

Transboundary collaboration has included control of illegal hunters moving across borders; control of fires in border areas; and monitoring of cross-border gorilla movements. Much additional effort has gone into dealing with the conflict situation. For example, in some cases, only the military were allowed to carry arms; at such times, unarmed park guards underwent training and conducted joint patrols with the military. In turn, the military received training from the park authorities on the ecological importance of the forest; health, behavior, and social structure of gorillas; and park regulations. This collaboration ensured that the military presence was not disruptive to the park and also sensitized an important interest group.

The high conservation and economic value of the gorillas, the enormous dedication of the government protected-area staff, and the presence of IGCP are the key factors that have ensured conservation of the gorilla population during this long-lasting and complex conflict.

Source: Lanjouw *et al.* (2001), Kalpers (2001a).

Monitor and try to control escalations in illegal resource use.
Step up law enforcement patrols and monitoring efforts if there is a risk of increased illegal extraction across the border. If feasible, collaborate with law enforcement agencies across the border to increase effectiveness of controls (see Box 2.1.9).

Collaborate with relevant authorities, organizations, and communities to mitigate impacts of refugees coming across the border.
Collaborate with development and relief organizations about planning, running, and site restoration of refugee camps (Section 2.2.3). Work with local communities likely

to host refugees to strengthen their environmental governance systems and help them conserve their resource base for the future. If necessary, help to ensure that resources are exploited in the most appropriate manner, for example, by passing on indigenous knowledge to refugees about optimum use techniques.

Establish a new base across the border.
If appropriate, make contingency plans to evacuate staff and equipment across the border to safety in a neighboring country. Communicate with relevant organizations on the other side of the border beforehand and arrange to support staff while they are there. Time spent in a neighboring country can be used as an opportunity to develop regional networks. Provide support to conservation in the country in conflict when possible, and remain poised to return home as soon as feasible to assist in the post-conflict phase. For example, during the civil war in the Republic of Congo, staff, equipment, and archives from the Nouabale Ndoki project were evacuated across the border to the adjacent Dzanga Sangha Reserve in the Central African Republic. From there, staff were poised to return as soon as possible. When the worst of the conflict passed, they moved back across the border and restarted operations very quickly (Blom and Yamindou 2001).

Look for opportunities for transboundary collaboration in post-war rehabilitation.
A neighboring country with strong capacity may be able to help to rebuild capacity in the conservation sector of a country emerging from conflict and provide other valuable assistance while capacity is being built. For example, South Africa provided training for Mozambican wildlife staff at various levels in preparation for post-war rehabilitation of the wildlife sector. Where wild animals have been hunted out on one side of the border during war, populations can be built up again through transboundary movement once hunting is under control after the war. This is being planned between Kruger National Park and the neighboring area of Coutada16 in Mozambique, as part of the Gaza-Kruger-Gonarezhou transfrontier conservation area (Government of the Republic of Mozambique, Government of the Republic of South Africa, and Government of the Republic of Zimbabwe 2000).

Look for opportunities to foster peace locally through transboundary conservation initiatives, and vice versa.
Transboundary collaboration in the management of shared ecosystems and resources may help to lay a foundation for deeper ongoing cooperation between neighboring countries and communities, reduce tensions, and help to rebuild divided communities. This includes peace parks—transboundary protected areas that are dedicated to conservation of biodiversity and cultural resources and to the promotion of peace and cooperation (Sandwith *et al.*, in press). Conversely, it may be possible to use peace

accords between nations as a basis to develop transboundary conservation and natural resource management.

Consider adopting a code for transboundary protected areas in times of armed conflict.
IUCN's World Commission on Protected Areas has developed a draft code for transboundary protected areas in times of peace and armed conflict (Sandwith *et al.*, in press). Consider adopting it, or elements of it, to try to enhance protection during conflict. IUCN may be able to provide technical assistance in interpreting and applying the code.

Develop partnerships with the different governing authorities while emphasizing neutrality.
NGOs who are able to demonstrate their neutrality, and who are working across boundaries, can sometimes become a common partner and facilitate communication. For example, the IGCP was able to promote common conservation practices informally among government conservation personnel in Rwanda, Uganda, and DRC through meetings and training sessions (Box 2.19).

Transboundary issues occur not only across international borders, but also across boundaries within countries. The UNESCO/UNF program for the World Heritage Sites of DRC was established specifically to fill a neutral role by transcending the political boundaries within the country. Currently, these boundaries mean that two and a half protected areas are within one regime and one and a half protected areas are within another. A fifth protected area varies: often 100 percent of the site is in government-held territory, but, recently, about 20 percent of it has become rebel territory (Kes Hillman Smith, pers. comm.).

For more information:

Kalpers (2001a); Kanyamibwa and Chantereau (2000); Lanjouw *et al.* (2001); Sandwith *et al.* (in press); van der Linde *et al.* (2001).

2.3 Funding and finance issues

A major challenge for those trying to work in conservation during or immediately after armed conflict is the difficulty of obtaining donor funds to support their work. If the onset of conflict is gradual, funds may grow scarce well before war actually begins. Funding may fall off for a variety of reasons. Some donors may pull out of a country for political reasons—for instance, bilateral donor countries may withdraw if their political philosophy differs greatly from the recipient country's. Both bilateral and multilateral donors may cease funding activities that benefit geographical areas taken by rebels.

Many donors are target-driven, and all want to see specific results for their investments. They are often unwilling to take risks in times of uncertainty, in case results are not obtained. Donors may cease funding if their implementing partners withdraw, leaving them without partners they trust to use their funds appropriately. They may stop funding environmental activities because they perceive that little or nothing can be achieved under the existing situation. If conflicts last a long time, donors may give up entirely and pull out with donor fatigue. During armed conflicts, bilateral and multilateral donors may also reallocate their support to fund other activities exclusively, such as humanitarian aid and efforts to promote good democracy and governance.

For all these reasons, funding often falls off when conflict occurs. However, when opportunities arise under the right conditions, conservation activities can make a big difference to long-term rural livelihoods and conservation, as outlined in previous sections. Very often, conservation opportunities are missed because funding is not available.

This section looks at possible actions by donors and conservation practitioners to overcome the problem. Some donors may be able to review current practices and adapt to the situation. However, it is important for those seeking funding to realize that there are limits to donors' flexibility. Neither multilateral nor bilateral donors may be able to change their practices all that much. Conservationists should understand that they may need to seek new funding sources, and they should develop different strategies to cope with the situation. This section also considers practical financial management during conflict.

The following issues are discussed in more detail:

- Maintaining funding support to the environment
- Developing flexible and opportunistic approaches to funding
- Diversifying the funding base
- Promoting sound financial management systems to cope with conflict

2.3.1 Maintaining funding support to the environment

Who is this for?

Donors, NGOs with their own funds, and donor partners.

What is the issue?

A continuous flow of funding is essential for many of the activities outlined in this guide to mitigate impacts of armed conflict on the environment, so it is very important to continue funding during and immediately after conflict, even if at reduced levels.

Why is it important?

If feasible, it is important for donors to continue funding environment partners during and immediately after conflict. If donors stay and maintain their support, they will be in a better position to provide timely funding when it is needed. They may also be able to avoid losing all their previous investments in a country. During wartime, the investment support that conservation partners need is often (but not always) at a lower level than in peacetime. The risk is also much higher. But if the funded activities succeed, they can achieve crucial results of very high value relative to the level of investment. Donor support at this time bears enormous importance, both financially and psychologically. If practitioners believe that donors continue to have faith in what they are doing, they have greater hope for the future, and are therefore more likely to endure the bad times without giving up. Even if organizations have withdrawn from the field, donors can fund other related activities, such as strategic planning and training, which helps to prepare for rapid action when peace comes.

Maintaining support even at low levels places the donor in a better position to provide funding during the post-war period as it is needed. Rapid post-war funding may be able to prevent the worst excesses of resource grabbing during the transition to peace (Section 1.2.6). Post-war policy reform, which is often badly needed, may also require funding and technical support for formulation and implementation.

How to address it?

Invest appropriate amounts.

Donors should recognize that they are unlikely to attain large spending targets successfully during times of conflict. In such times, a little may go a long way. It may be wisest to invest smaller amounts over the longer term. If donors cannot disburse small enough sums because of the scale of their operations, it may be possible to operate through an intermediary organization.

Look for creative ways to achieve conservation goals.

In times of conflict, it may be easier to achieve conservation goals by melding them with social or economic goals—funding holistic activities such as social programs with environmental linkages. This may be particularly relevant as part of humanitarian funding. Such creative projects also provide a mechanism to promote conservation (for example, of the natural resource base and therefore long-term livelihoods) even if environmental funding per se has been withdrawn. See Box 2.20, concerning USAID environmental funding during the recent crisis in DRC.

Support existing partners, and select new partners carefully.

Donors should maintain relationships with their existing environment partners during and immediately after conflict, providing funding where feasible. When seeking new

Box 2.20 USAID environmental funding in DRC

Despite the unstable situation in DRC in 1999, USAID was able to fund certain forest and biodiversity activities at a time when the only other activities it supported there were in health and humanitarian work. Two main conditions made this possible. While aid from the US to many fields was restricted, a congressional mandate enabled USAID to work with the DRC government in tropical forestry and biodiversity. A mechanism already existed for the USAID Mission in DRC to provide funds, through partners in the Central African Regional Program for the Environment (CARPE), a USAID-funded regional program promoting conservation of Congo Basin forests.

These funds allowed a range of small-scale activities to be undertaken with organizations in DRC: capacity building, a small grants program, preparing for peace activities, data collection, inputs to protected-area management, environmental education and training, and establishing a CARPE presence in-country to support these activities. Through their funding mechanisms, the CARPE partners were able to retain the funds beyond one financial year, and use them as and when conditions were suitable. The funding level was not high ($970,000 over 3 years), yet these funds played an important role in supporting the environment sector by contributing directly to conservation, building capacity, keeping people interested and involved, and preparing for peace.

Source: Diane Russell, pers. comm.

partners, it is very important to identify credible organizations that are committed to staying and working in the area in the long term. Donors should beware of less credible and unscrupulous individuals and organizations who may seek funds opportunistically and then not deliver. Check applicants' credibility and track records carefully. Indiscriminate funding of less reputable NGOs can create a general atmosphere of mistrust and destroy collaboration among NGOs.

Encourage partnerships where appropriate.

It may be useful to provide funding support to partnerships of different organizations, for example, partnerships between government and NGOs, or between international and local NGOs. Alliances of conservation and relief or development NGOs may also be very effective at this time.

Review environmental impacts of relief programs.

Donors should evaluate the environmental impacts of relief programs they plan to fund, and ensure adoption of environmental guidelines in their implementation.

Ensure donor coordination.

As in peacetime, donor coordination is important. During conflict, this coordination is less likely to be provided by government, projects, or NGOs, and the donor community should ensure that coordination occurs. Such forums can also provide a good opportunity to exchange information on current developments. Donor coordination becomes particularly important in preparing for and during the post-war transition

phase. This is a time when government capacity for communication and coordination is still low, but funding opportunities are starting to open up again. Coordination helps to identify priorities and avoid gaps and overlaps in funding, so that aid can be most efficient and effective.

Ensure good communication.
Situations can change very quickly during conflict. Donors and their partners should stay abreast of current developments and communicate frequently. Each party will have a different perspective and valuable insights to share. Partners should keep donors apprised of progress and challenges in implementing their activities and of new opportunities for funding. Donors should keep partners informed of the consequences of conflict on their funding, including existing and new conditionalities. Similarly, partners should explain to donors the consequences of withdrawing funding.

For more information:

Blom *et al.* (2000); Blom and Yamindou (2001); Hart and Mwinyihali (2001); Hatton *et al.* (2001); Kalpers (2001a); Plumptre *et al.* (2001).

2.3.2 Developing flexible and opportunistic approaches to funding

Who is this for?

Donors, government staff, and NGOs.

What is the issue?

Funding requirements during and after armed conflict are often erratic and evolve rapidly. Donors and their partners should develop flexible and opportunistic approaches to maintain their progress.

Why is it important?

Circumstances often change quickly around conflicts. Windows of opportunity for funding can open suddenly and close just as rapidly. Funding of long-term, blueprint projects is not possible. What is needed is rapidly disbursed and flexible funding to respond to changing situations (Blom *et al.* 2000). Often the amounts required are relatively small. This type of funding is difficult for donors with a long lead time, large disbursing levels, and a complicated bureaucracy, or with very specific (and often political) conditions for use of funds. It is more appropriate for donors with high risk-tolerance, fast disbursement mechanisms, flexible funding levels and objectives, and without political conditionality.

How to address it?

Enhance donor flexibility.

Where feasible, donor organizations should adopt more flexible mechanisms to increase their responsiveness during and after armed conflict. For example, permit reallocation of funds for different purposes within a project budget or within a partner organization. Consider relaxing sustainability criteria that demand counterpart funding (see Box 2.21). Extend deadlines for expenditure of funds. Develop mechanisms for quick disbursement of small amounts of funding. However, many large bilateral and multilateral donors will find it difficult, if not impossible, to make major changes in the way they operate, particularly if they have a very bureaucratic or politically driven system. Donors who do have good flexibility should recognize their comparative advantage and consider increasing their support to areas experiencing warfare. Foundations are particularly well placed in this regard.

Establish emergency funds.

Some major donors already have emergency funding that can be tapped for environmental purposes. For instance, the European Union provided funding for an emergency program to rehabilitate Gorongosa National Park in Mozambique (Hatton *et al.* 2001). However, in many cases the levels of funding required are too low for these sources to disburse efficiently. Foundations and NGOs with unrestricted funds (that is, funds of their own, or funds provided by flexible sources) are in a much better position to provide emergency funding for rapid disbursal in conflict situations. They may give comparatively modest amounts of money to support particular local programs—for example, to provide short-term training, to buy radios or other equipment, to fund a study on how to mitigate environmental impacts of a particular

Box 2.21 Relaxation of donor criteria for sustainability during conflict

Donors do not normally pay recurrent costs, such as salaries of government agencies, requiring that they be financed with counterpart funding to ensure sustainability. However, this may not always be possible in conflict and post-conflict situations. In the World Bank/Global Environment Facility-funded Institutional Capacity Building for Protected Areas Management and Sustainable Use project in Uganda, the donor had not intended to fund salaries. However, in 1999, rebels attacked a group of tourists visiting Bwindi National Park; then several other major revenue-earning parks were forced to close because of security concerns. Tourism revenues fell dramatically. The Uganda Wildlife Authority (UWA) found itself facing severe short-term financial hardship. The government of Uganda and The World Bank revised the project budget to allow payment of a significant part of UWA's salary costs for the next few years (on a declining basis), allowing time for tourism to recover.

Source: Agi Kiss, pers. comm.

refugee camp, or to bridge a small funding gap in project running expenses. The Netherlands Committee for IUCN operates a Tropical Forest Grant Program that funds local NGOs to undertake activities in conflict situations (see Box 2.22).

Box 2.22 Emergency funding by the Netherlands Committee for IUCN

The Netherlands Committee for IUCN (NC-IUCN) runs several grants programs, including the Tropical Rainforest Programme (TRP) and the Small Grants for Wetlands Programme, which provide funding for local NGOs (but not international NGOs or governments). Started in 1994, TRP has supported more than 600 projects in the field of conservation and sustainable use of tropical rain forests worldwide, including several in armed conflict situations. Funding is flexible and quickly disbursed. Maximum funding per project is US$75,000. Additionally, TRP can provide for "urgent action funding" of up to US$5,000 for small projects that need to be executed urgently. Decisions are made within two weeks.

Funding in armed conflict situations has included projects in Sierra Leone, Burundi, DRC, and Colombia. In Sierra Leone, support was provided for a project that involved students and school children in practical conservation activities such as monitoring chimpanzees *(Pan troglodytes)*. This provided positive experiences in the midst of the violent situation the young people were facing in their daily lives.

NC-IUCN supports local grassroots organizations during conflict, seeking partnerships with these organizations since they often remain in conflict areas when other larger/international organizations leave, and when many of their donors abandon them. NC-IUCN accepts that the projects it funds during wartime may have reduced effectiveness because of the conflict situation. The need for flexibility in NGO project planning and reporting is recognized, because of the difficult circumstances the NGOs often work in. More than once project personnel supported by NC-IUCN have been killed. The structure of the funding programs makes flexibility possible through: fast decision-making; direct communication with the NGOs; access to a broad network for advice and references (through IUCN, embassies, other local NGOs, and an advisory group); good understanding of local situations; funding of short-term projects; and ability to provide small amounts of funding.

NC-IUCN prefers to support organizations that have a neutral position and that are able to work with the various parties in the areas concerned. It recognizes that conservation organizations in conflict areas sometimes have a neutralizing role in the conflict. In addition, NGOs can play important roles during conflict, when governmental structures have collapsed, as well as in post-conflict rehabilitation. NC-IUCN recognizes that NGOs remaining in conflict areas are the world's eyes and ears, not only for environmental aspects but also on the humanitarian side.

Since its main goal is nature conservation, NC-IUCN does not fund requests that primarily focus on humanitarian work. Although it appreciates the considerable need for these projects, it focuses on long-term environmental aspects such as rehabilitation of natural systems.

Further information on the funding opportunities of NC-IUCN is available on the following Web sites: www.nciucn.nl and www.wetlands.nl.

Source: Esther Blom, pers. comm.

Seek new opportunities.
Donors and practitioners alike should look for new opportunities created by the conflict situation. This requires keeping abreast of the current situation and being creative. For example, working in collaboration with community or humanitarian projects may create conservation opportunities. If local conservation staff are no longer fully occupied, consider providing them with training to prepare them for the times ahead. They will need a diverse range of skills at the onset of peace in order to cope with the transition period (Section 2.1.6).

Plan to provide environmental funding during the transition to peace.
It is particularly important for donors to plan for contingency environmental funding during the transition to peace. At this time, circumstances can change very quickly, and there are urgent, narrow windows for crucial donor funding. In Mozambique, for example, when conflict ended and formal control over resources was still weak, the private sector mobilized very fast and succeeded in seriously depleting natural resources (Hatton *et al.* 2001). At the same time, donors were concentrating on short-term humanitarian work, and were very slow to fund the environment sector. Some donors compartmentalize funds (e.g., between relief and development support), creating considerable administrative difficulties if they want to fund environmental aspects at this time. In Mozambique, it took about four years to obtain significant amounts of environmental funding, and even then funds were mostly earmarked for large, inflexible projects that were slow to produce results on the ground (Simon Anstey, pers. comm.).

For more information:

Blom *et al.* (2000); Christen and Allen (2001); Hart and Mwinyihali (2001); Hatton *et al.* (2001); and Kalpers (2001a).

2.3.3 Diversifying the funding base

Who is this for?

Fund-seeking government departments and NGOs, foundations, and trust fund developers.

What is the issue?

Since many donors reduce or withdraw funding during conflict, environmental organizations working in conflict-prone areas should diversify their funding bases to increase chances of adequate funding during and immediately after conflict.

Why is it important?

Many of the more traditional donors are likely to cease funding during conflict for reasons outlined in the introduction to this section, and are often slow to resume funding for post-war environmental activities. Donors may set stringent conditionalities in times of conflict. For example, donor-funded expatriate personnel, vehicles, and equipment may be withdrawn at short notice from areas in or near to conflict.

Environmental organizations may need to diversify their funding bases in order to cover the types of activities they wish to carry out during and immediately after conflict. Some general aims are:

- Develop greater long-term financial independence from donors.
- Ensure minimum core funding for basic operations that is flexible and independent.
- Establish a reserve of funds to draw upon in short-term times of need.

How to address it?

Review funding base.

Organizations should review their funding bases well in advance of conflict, and continue to do this periodically. The review should analyze the proportions of funding from different types of sources. The main sources are bilateral and multilateral donors, foundations, NGOs, personal giving (from NGO subscriptions and fundraising appeals), corporate support, investments (e.g., trust funds), and enterprise. Not all funding sources are appropriate for every organization. The review should also examine the proportion of funds from individual sources, to identify possible excessive reliance on a single source. Consider which sources are more likely to continue support during conflict, and which are more likely to withdraw. Find out what conditionalities each donor may set during crises so there are no sudden surprises.

Identify the major risks and decide whether it is advisable to make changes to the funding base, for example broadening it to include different types of sources and to reduce dependence on a single donor. Weigh this against the time needed for fundraising, and the extra administrative burden necessary for tracking separate expenditures and reporting to several donors.

Look for new funding sources.

Be creative about looking for new funding sources. Here are some ideas:

- Regional donor funding may be an option if national funding dries up.
- Funds in other technical sectors with clear linkages to the environment are a strong option. With the humanitarian sector, this includes supporting best environmental practices for refugee camps (UNHCR recommends environmental

funding should be an integral part of emergency funding appeals; UNHCR 1998a). The democracy and governance sector may be interested in promoting better governance through appropriate control and wise use of natural resources.

- Foundations are often more flexible, and have fewer political constraints if bilateral and multilateral funding is difficult. See Box 2.23 for a source of information on foundations.
- Leverage funding: use one source of funding (even if small) to help to attract others. If one donor shows confidence and commitment, others may follow.
- Trust funds are a good way to establish financial independence for management of an area (see Box 2.24), though they generally take about two years to establish and so are not a quick fix. This is a way for bilateral and multilateral donors to make a one-off payment to provide long-term support that can continue during conflict.
- Endowment funds can cover NGOs' basic operations and allow financial independence.
- International NGOs that maintain a presence during conflict may be able to pass on funds they have raised internationally to other organizations in-country.
- Emergency appeals can be launched: this can be particularly effective when trying to save biodiversity that possesses international importance and tremendous public appeal (for example, emergency appeals by IGCP partners for mountain gorilla conservation funding).
- Commercial activities such as consultancy work may be a way to generate income for an organization (though for NGOs, the enterprise side should be run separately from the not-for-profit side of their work).
- Support from the private sector may be a possibility in some circumstances during conflict; it is certainly a growth area for conservation funding during peacetime. However, reputable companies often cease operating in the field during conflict,

Box 2.23 Foundation funding

The Foundation Center offers a large amount of information about a wide range of US-based foundations. Its Web site is http://fdncenter.org/. It has a limited search facility free of charge, and an online Foundation Directory containing extensive information on foundations, their geographical coverage, technical areas of interest, level of funding, and other conditions (subscription to the online directory in 2001 was $20 per month; also available on CD). The Center also offers training on fundraising, including proposal writing. (The Foundation Center, 1627 K Street, NW, 3rd Floor, Washington, D.C. 20006-1708, USA)

Source: Christine Spade, pers. comm.

Box 2.24 Trust funds, alternative funding, and conflict

Establishment of trust funds is a specialized process, documented for example in Global Environment Facility (1999) and Spergel (2001). What follows are some ideas for ways to ensure that trust funds can continue to support conservation during and after conflict. There are also some creative ideas about alternative funding during conflict situations that have not yet been tested.

- Keep funds offshore and in hard currency to maintain their value. Avoid holding on to large amounts of local currency (e.g., from debt-for-nature swaps), since local currency is often subject to sudden devaluation and high inflation in times of armed conflict. Convert funds into local currency only as needed.
- Select trust-fund board members to include people from outside the country, design the trust fund so that the board is likely to remain neutral and support conservation objectives, and minimize the risk that the trust fund might be used for political ends or plundered unscrupulously during conflict.
- Consider establishing a "sinking fund" type of trust fund to support a particular activity during conflict (e.g., supporting protected-area management during conflict until government funding resumes). Such funds are all intended to be spent during conflict. This is similar to the emergency funding proposed in Section 2.3.2, but it is created to serve a specific situation and its funds remain invested until needed. The funds should be invested outside the country and controlled by neutral foreign entities.
- Consider opportunities to leverage conservation benefits during wartime. For example, it may be possible to buy up land with high biodiversity value at much cheaper prices during war rather than in peace. Similarly, it may be possible to pay private landowners (who may be desperate for cash) relatively small amounts of money to establish long-term conservation practices on their land; or to buy out logging or mining concessions at very depressed prices. But weigh benefits against risks: will the validity of such transactions be respected by the regime in power after the conflict ends?
- In conflict-prone regions, in cases where conservation funding mechanisms depend on a recurrent (revolving) inflow of funds (e.g., from tourism fees, as in the Bwindi trust fund in Uganda), it would be prudent to set aside, say, 5 percent to 20 percent of normal-year revenues to serve as a buffer (i.e., a reserve fund) that can be drawn down during conflict, when revenues are likely to cease.
- For the same reason, it might be important to allow part of the principal or capital of an endowment fund to be spent down under certain emergency conditions and then replenished later on. Such a plan would need to be very clearly spelled out in the legal charter or bylaws of the fund.

Source: Barry Spergel, pers. comm.

leaving only the less scrupulous ones. Consider: is it possible to accept private-sector funding and maintain neutrality and integrity, with no compromises?

For more information:

Fowler (1997); Global Environment Facility (1999); Spergel (2001); and UNHCR (1998a).

2.3.4 Promoting sound financial management systems to cope with conflict

Who is this for?

Organizations working directly in conflict or post-conflict situations.

What is the issue?

During and immediately after conflicts, local financial management systems of organizations working in affected countries are often severely impacted. Organizations have to adapt existing financial systems or develop new ones in order to continue operating.

Why is it important?

Banking systems may become unreliable or collapse completely. In eastern DRC, this occurred before the conflicts (Wabbes Candotti 2000). Local currency may lose value, and cash payments in hard currency may become the only way to operate. The collapse of conventional financial systems poses security risks to personnel who handle the funds and places greater dependence on the honesty, commitment, and financial management capability of staff members. Yet the continued flow of funds is key to supporting operations at this time. Organizations need to plan and establish new financial systems or adapt existing ones to ensure continued reliable flow of funds to their operations.

How to address it?

Plan alternative financial systems beforehand.
Don't wait until the crisis happens. Make contingency plans for management and transfer of funds. Involve staff at both ends to find the most practical solutions. Include alternative courses of action in case the main plan fails. Ensure that all those who need to know the plans are fully informed of them.

Give high priority to maintaining staff salary payments.
This has already been covered in Section 2.1.3; it is extremely important to maintain regular salary payments (Plumptre *et al.* 2001).

Maintain an emergency cash reserve.
Environmental organizations should aim to keep a local emergency cash reserve in case of logistical problems in accessing and transferring funds during crises. This applies to both country offices and field projects. It is essential to find a safe way to hold these funds. If local banks are nonexistent or unreliable, it may be possible to make arrangements through other organizations, such as local businesses, NGOs, or

relief agencies. A safe is very important on site, but avoid keeping large amounts of cash in it to avoid risk to those who know how to open it. Staff should never risk their lives to protect cash.

Keep a financial reserve in case donor funding stops.

In difficult times, organizations will need a financial reserve, if possible in hard currency. Build a reserve, and hold it in a reliable bank or a secure location from which it can be withdrawn quickly when needed.

Develop alternative logistical arrangements to transfer funds.

If cash transfers cannot be made through banks, look for alternatives. Again, other organizations may be able to help. If staff have to transfer cash, designate two or three people to carry it and split the cash between them. Vary travel routes and times. Use a private vehicle, not public transport in cities, and never inform the driver that cash is being carried. Travel outside the city should be done by plane if possible; create contingency plans in case of delayed flights, especially what to do if stranded with cash overnight. Minimize the number of people who know about transfers, and avoid talking about transfers on the radio (Rogers and Sytsma 1998).

Avoid having very large amounts of funds in local currency.

If very large amounts of local currency are sitting in local bank accounts, try to convert it all to hard currency to guard against future devaluation or inflation. Funds are probably safer in an international bank than a national bank. It might be best to transfer funds out of the country, if it is feasible and legal to convert and transfer them.

For more information:

Plumptre *et al.* (2001); Rogers and Sytsma (1998).

CHAPTER
3

Conclusions and the way forward

3 Conclusions and the way forward

The conservation community is well placed to take a wide range of actions at different levels in armed conflict situations. While it is not possible to avoid all of the environmental impacts these conflicts cause, it is possible to prevent or at least mitigate some of them. This often requires new approaches in working toward long-term conservation goals. Understanding of impacts, the underlying causes, and appropriate mitigation approaches is growing, but is still incomplete. More information and analysis is needed, along with improved communication of experiences and lessons, better planning, and capacity building.

3.1 Conclusions

Major conclusions are outlined below. They stress the need for adoption of new approaches and outlooks by conservation organizations to enable them to work most effectively in times of conflict. They cover both internal organizational aspects, and key areas of activity for the conservation sector. The latter includes collaboration with other organizations and sectors.

Increase flexibility

Needs shift during times of armed conflict and some planned activities cannot be implemented under changed circumstances. Conservation organizations need to develop new and flexible strategies to continue to function effectively at such times, and must be prepared to:

- **Adapt to new circumstances.** Organizations need to be opportunistic, and may have to temporarily change the focus of their activities in order to continue to work toward their long-term goals, recognizing that there are no blueprints and that each situation is unique.

- **Adjust and intensify planning procedures.** Conservation staff need to review plans frequently, in light of shifting situations, using results from the monitoring of activities (Section 2.1.1) to help assess what changes or adjustments are needed.

- **Strengthen the capacity of local staff and field offices.** Increase self-reliance and decentralize responsibilities as appropriate and provide a degree of decision-making capacity and other skills to allow these offices to function more autonomously during times of instability.

Emphasize livelihood linkages, while staying focused on long-term goals

During humanitarian emergencies, the first priority is saving lives. During and immediately following armed conflict, the environment falls in priority relative to humanitarian concerns, but improved collaboration among environment, relief, and development sectors can often mitigate or even avoid many harmful impacts without hindering essential operations. Conservation organizations need to:

- **Recognize that economic strategies are often determined by basic survival needs at all levels.** For local communities, a shift to greater reliance on subsistence activities means that natural resources often support a larger share of livelihood strategies. These realities force the conservation sector to take a broader approach to natural resource management, one that prioritizes livelihood security as well as biodiversity conservation.

- **Identify community needs** during and following conflicts, and incorporate these needs into conservation activities.

- **Demonstrate a commitment to the welfare of the community** to build trust and clout within the community, and to provide the basis for a long-term collaborative relationship.

Strengthen capacity to maintain a presence during and especially immediately after conflict

When conservation organizations maintain a presence during conflict they tend to survive crises better, and ultimately achieve more successful conservation.

This is not to suggest that staff should stay on-site at all costs but, rather, to highlight actions that can improve security and may permit an organization to maintain a presence where it might not have otherwise been possible.

Staff need to be made aware of all emergency plans. Knowing and understanding the contents of an emergency plan is not enough, though—they need to find it acceptable and make sure they can implement it properly. Moreover, staff should also be given the chance to dissent and leave if they wish. They should not be forced to accept the consequences of staying.

Strategies for maintaining a presence include:

- **Increasing the autonomy and self-reliance of local NGOs and government field staff,** and strengthening their institutional capacity by training junior field staff. In the absence of senior staff or international assistance, these junior staff members may have to assume all responsibilities. It is often junior NGO staff who ensure that local NGOs have the minimum capacity to remain on-site.

- **Maintaining neutrality and impartiality** as much as possible, to enable working on both sides of a conflict, if necessary. Neutrality can be demonstrated by actively cultivating relationships and building trust with different actors in a conflict situation, and remaining diplomatic while advocating conservation objectives.

Use reliable, up-to-date information to assess the situation

Circumstances can change quickly during and following periods of armed conflict. In order to achieve conservation goals effectively, organizations need to understand and respond to new and changing conditions by:

- **Collecting relevant information** on the conflict, including its nature and root causes, the political, social, and macro-economic context, and the most current information about likely developments and impacts. Information should be collected at local, national, and international levels via networks of reliable sources within each country and region.

- **Assessing threats and opportunities** in the short and longer term, in light of the information collected above. This involves predicting how the conflict may develop, and assessing potential direct and indirect consequences for the environment, as well as for the organization.

- **Assessing organizational capacity to respond** to the situation, including a needs assessment (both immediate and longer term) and a resource assessment. The needs assessment should include staffing, training, funding, equipment, infrastructure, communications, and logistics. The resource assessment should cover the organization's existing or available resources.

Ensure good planning

Good, proactive planning is essential to prepare for crises and to remain effective during times of conflict. Once a crisis hits, it is often too late for such planning. This involves:

- **Developing contingency plans for before, during, and after conflict.** Organizations need to employ an approach that uses operating guidelines, contingency analysis, and flexible tactics. They need to ensure that communications systems are in place to maintain effective and up-to-date flows of information between headquarters and field offices during times of conflict. Further, staff security guidelines must be developed to facilitate decision making during crises, e.g., how to decide when to pull out of an area? Who decides? How to keep local staff vigilant? How to keep headquarters staff from overreacting? How to determine when it is safe to return? Plans should be updated frequently.

Collaborate within and between sectors

Collaborating with other organizations can be an effective way to achieve conservation goals while also addressing the broadened range of needs imposed during times of armed conflict. This includes collaboration within the conservation and natural resource sector, as well as with other technical sectors, such as relief, planning, development, and democracy and governance sectors. Collaboration across institutional sectors is also important (NGOs, government, communities, donors, private sector, and military).

Such collaboration is rarely simple or easy. A considerable amount of time must be invested to build the trust and develop the relationships necessary to succeed. Collaboration can be facilitated by:

- **Improving communication,** increasing consultations, training, workshops, and joint planning through development of a disaster plan are all potential strategies to facilitate cross-learning and technical exchange.

- **Developing goodwill and trust and building relationships outside of times of conflict,** recognizing that this can take time. Create a common language between sectors to help organizations identify common ground and incorporate different perspectives.

- **Identifying common goals**—highlighting incentives as well as disincentives—for improving collaboration. With the relief sector, show that the environment is a humanitarian concern, and that a healthy environment and natural resource base are intrinsic to survival. The niches filled by each organization, with its respective roles and mandates, should be clearly identified.

- **Making environmental information more readily available during emergencies,** including information on natural resources, biodiversity, and ecologically important areas.

- **Improving communication between headquarters and field offices** in all sectors, to help implement environmental guidelines in the field.

Try to ensure continued funding during and after conflict

It is important to maintain funding during and immediately after conflict, even if at reduced levels, as this will place organizations in a better position to act when needed and help to avoid the loss of previous investments. There may be a higher risk involved with funding during times of conflict, but if the funded activities succeed, they can achieve crucial results of high value relative to the level of investment. Strategies for funding include:

- **Ensuring ongoing and flexible support during and especially immediately after conflicts.** It should be emphasized that even modest amounts of support to pay field staff and cover basic operating expenses and field equipment may be enough to maintain a site-level presence.

- **Keeping donors informed about situations on the ground.** Provide current, on-the-ground information for donors so they can make informed decisions about risks and opportunities.

- **Seeking alternative funding sources if necessary,** such as private foundations, in the event that bilateral or multilateral funding becomes unavailable. Establish long-term funding mechanisms wherever possible.

- **Establishing emergency funding mechanisms** for maintaining and transferring funds during times of conflict—channeling funds via local NGOs, for example.

- **Repackaging, marketing, and modifying language.** Environment programs need to work harder to market themselves and demonstrate their relevance during times of conflict. They need to be creative and innovative, and modify language when necessary.

Reconcile long-term sustainable practices with immediate demands on natural resources, both during and after conflict

During and following armed conflict the environment is particularly vulnerable, yet it is usually low on the agenda and not adequately taken into account. In these times, governing authorities are often starved for cash—to finance the conflict, kick-start the economy, or pay off war debts. Further complicating matters, these are often times of confusion and poor communication within and between government ministries and technical sectors. These challenges may require strong action, including innovative approaches to achieving conservation goals, for example, by:

- **Approaching conservation from a development and economic perspective,** e.g., by helping rehabilitate tourism infrastructure and other forms of development to generate revenue that can then fund conservation activities.

- **Working with the private sector** to encourage socially and environmentally responsible practices, especially regarding post-war natural resource extraction.

- **Promoting awareness of longer term consequences of resource depletion,** and participating where possible in decision-making processes.

- **Seeking least-harmful short-term actions.**

Support formulation of post-war policy and legislation

Following conflict, there is often a window of opportunity for countries to update antiquated or inappropriate policies. Although there may be enthusiasm for policy reform, capacity for formulating and implementing new policy is often low at this time. Capacity is often inherently low in the natural resource and environment sector, even during peacetime. NGOs and donors can help by:

- **Providing information** as a basis for policy (e.g., data on biodiversity, natural resources, and community use of resources).

- **Building capacity for policy formulation** (e.g., arrange short training courses and study tours to other countries for policy makers to see different policies in action).

- **Providing funding for policy reform,** while encouraging a fair and open decision-making process. Because new policies can also demonstrate to donors that strategies have been developed for the future, they often help to attract more funding.

3.2 Recommendations for future priorities

BSP's Armed Conflict and the Environment project has worked with many partners to identify and raise awareness about the negative impacts of armed conflict on the environment, and to identify strategies for mitigating these impacts before, during, and after conflict. Many others are working in this field, and understanding of the relationships between conflict and environment is growing fast. But while much has been accomplished, more remains to be done. The issues are complex, and developing mitigation strategies in armed conflict areas is an ongoing process. For this reason, future priorities need to build on existing knowledge and experience while expanding into areas not yet sufficiently addressed.

A number of recommendations for future priorities are listed below. While these are primarily targeted at policy makers and practitioners from the conservation community, other sectors may find them useful as well.

Information gathering and analysis

- **Continue existing analysis of environmental impacts, and expand analysis to include social, economic, legal, policy, and political aspects.** Expand on current efforts to develop a more comprehensive understanding of armed conflict and its environmental impacts. Integrate environmental data with social, economic, legal, policy, and political data relevant to the circumstances. Use this information to assess risks and opportunities and to develop appropriate response strategies.

- **Compile databases of existing environmental information, including information that can be used as a baseline, and key ecological indicators,** both within and between regions, from the site to the landscape level. Accurately assessing the impacts of armed conflict on the environment is impossible without good baseline data indicating the state of an area prior to the conflict. Develop more scientifically rigorous and realistic methods for evaluating the impacts of armed conflict on the environment. Expand monitoring and evaluation capabilities. Integrate this information with existing databases.

- **Continue to research the relationship between environmental degradation and conflict,** to help policy makers and practitioners become more proactive and enable them to address causes as well as impacts of environmental degradation and conflict.

Communication

- **Share information, results, and lessons, and network across sectors.** The results and lessons from experiences of working in areas of armed conflict need to be

shared both within and across sectors. Present information in a manner that is appropriate for each audience. Communicate results to policy makers and practitioners, ensuring that research findings reach practitioners in the field. Create a clearinghouse for information, experiences, and lessons learned by gathering local-, regional- and international-level information, experiences, and lessons learned on conservation in areas of armed conflict. (IUCN might be a suitable organization to host a clearinghouse.) Create new networks and build on existing networks of expertise in these issues, and compile centralized consultant rosters. Maintain a listserve to facilitate communication and increase collaboration among policy makers and practitioners from relief, development, and conservation organizations working in areas affected by conflict. Tap into global experience with conservation in conflict areas by collaborating with governments, NGOs, and research institutions in other regions to gather relevant lessons.

- **Promote consumer awareness and responsible behavior** by addressing the demand side of resource extraction as well as the supply side and by reducing consumption of resources whose extraction is fueling conflicts. Partner with advocacy groups to leverage on-the-ground knowledge to help control illicit trade in natural resources. Advocate the development of a system of certification where one does not exist. Identify the key players in these situations, their vulnerabilities, and the options available to them.

Planning and capacity building

- **Develop conservation sector security guidelines** for disaster preparedness, mitigation, and rehabilitation, building on existing relief sector guidelines as appropriate. Determine appropriate organizational processes for making difficult decisions under crisis conditions (deciding whether and how to maintain a presence, defining an appropriate role during times of conflict).

- **Reinforce and strengthen local, national, and international capacities** for impact mitigation through targeted training courses and workshops, both during and after conflict. Focus efforts on local staff, and find ways to maintain morale, even during times of conflict and instability. Introduce conflict and impact mitigation findings into the curriculum at African wildlife colleges and universities.

- **Build local capacity for applied research and monitoring.** Provide specific training on conflict and conservation to local NGOs, as they often have to address the impacts of conflict alone. Modify existing local impact monitoring tools and provide technical support to develop locally measurable indicators (e.g., wildlife surveys, water quality analysis).

- **Adapt and use existing in-country environmental impact assessment (EIA) methods and capability,** if they exist. Transfer findings and lessons learned between natural disasters and armed conflict situations.

- **Modify existing rapid environmental assessment (REA) methodology** for gathering critical environmental data quickly and efficiently during crises. Such assessments can help prioritize and direct interventions to minimize environmental impacts during crises (Kelly 1999).

- **Improve ability to anticipate impacts** from conflict before they occur. Identify patterns in conflict and impacts, and develop indicators to better anticipate impacts before they occur. Develop proactive response strategies based on this information, in collaboration with partners. Disseminate findings to decision makers and practitioners globally.

International legal mechanisms

- **Explore international legal mechanisms** for redressing negative environmental impacts of armed conflict. Gather better on-the-ground information to improve accounting for damages and assignment of responsibility. Make greater use of international protocols and conventions to address this issue, following the example of the World Heritage Convention, among others.

3.3 Final Thoughts

Preparing for, coping with, and recovering from conflict are persistent challenges that every generation must face. It is hoped that the findings and recommendations in this guide will be of use to those working and living in areas affected by armed conflict. The need for effective conservation does not change with the rise and fall of conflict. Organizations are encouraged to persist and be creative about finding ways to continue working while remaining safe and healthy, and to build on the knowledge in this publication by adding ideas, experiences, and lessons learned. No one can provide all the answers to the complex and troubling questions that arise in times of conflict, but by sharing collective knowledge and experience, much progress can be achieved.

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Note: *Case studies, papers, reports and publications associated with BSP's Armed Conflict and the Environment Project may be accessed on the Internet at:* ***http://www.BSPonline.org.***

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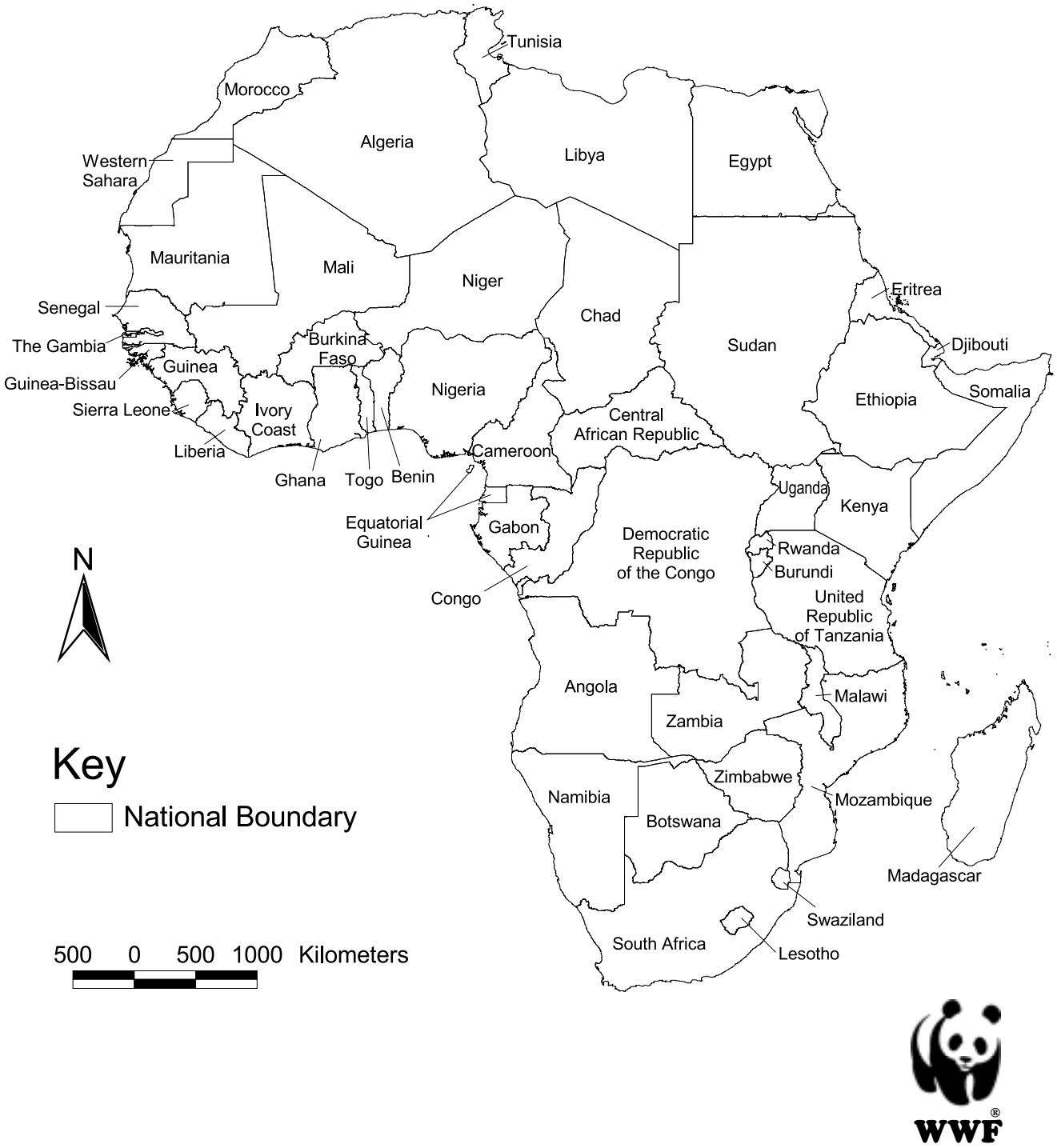
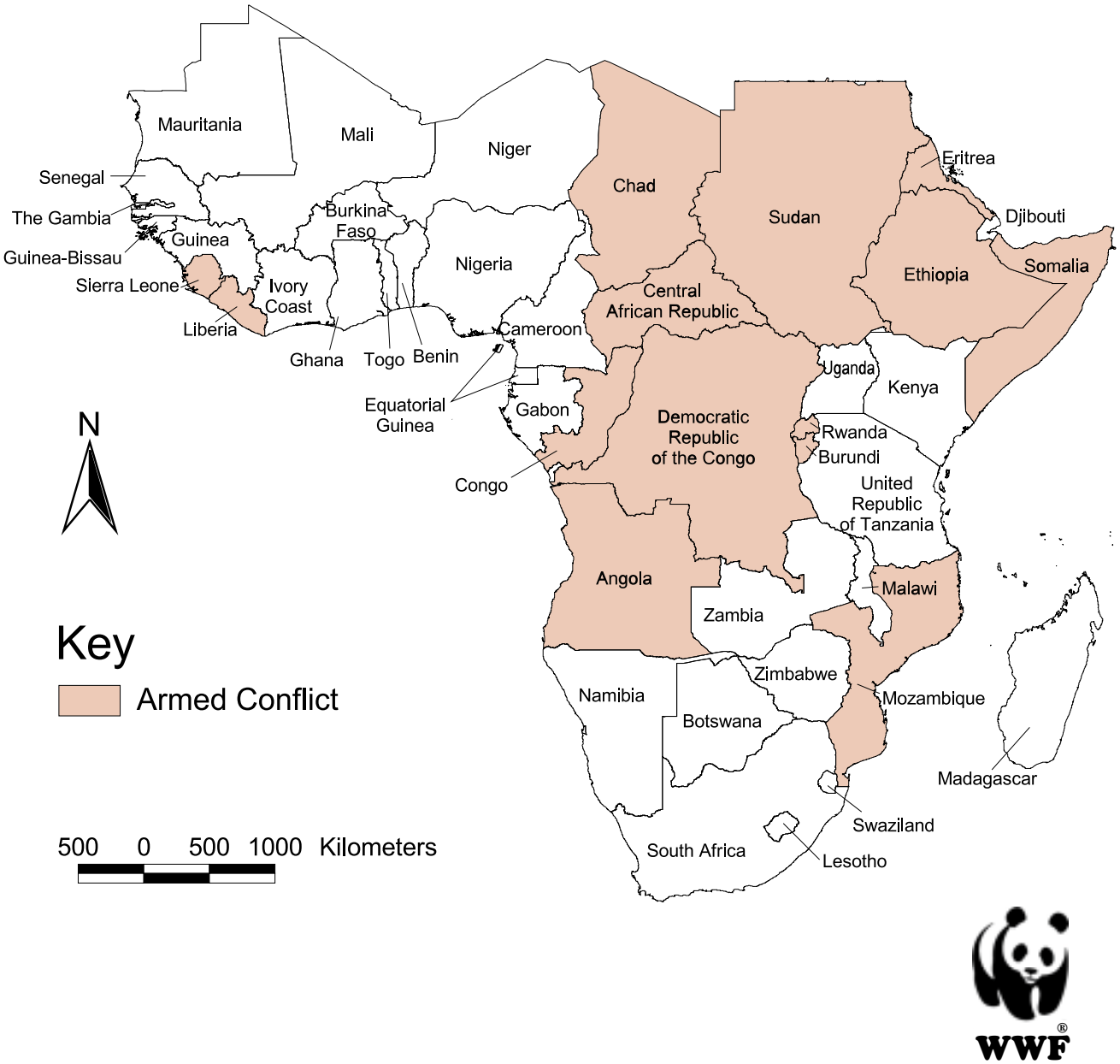
Maps

MAP 1 — COUNTRIES OF AFRICA



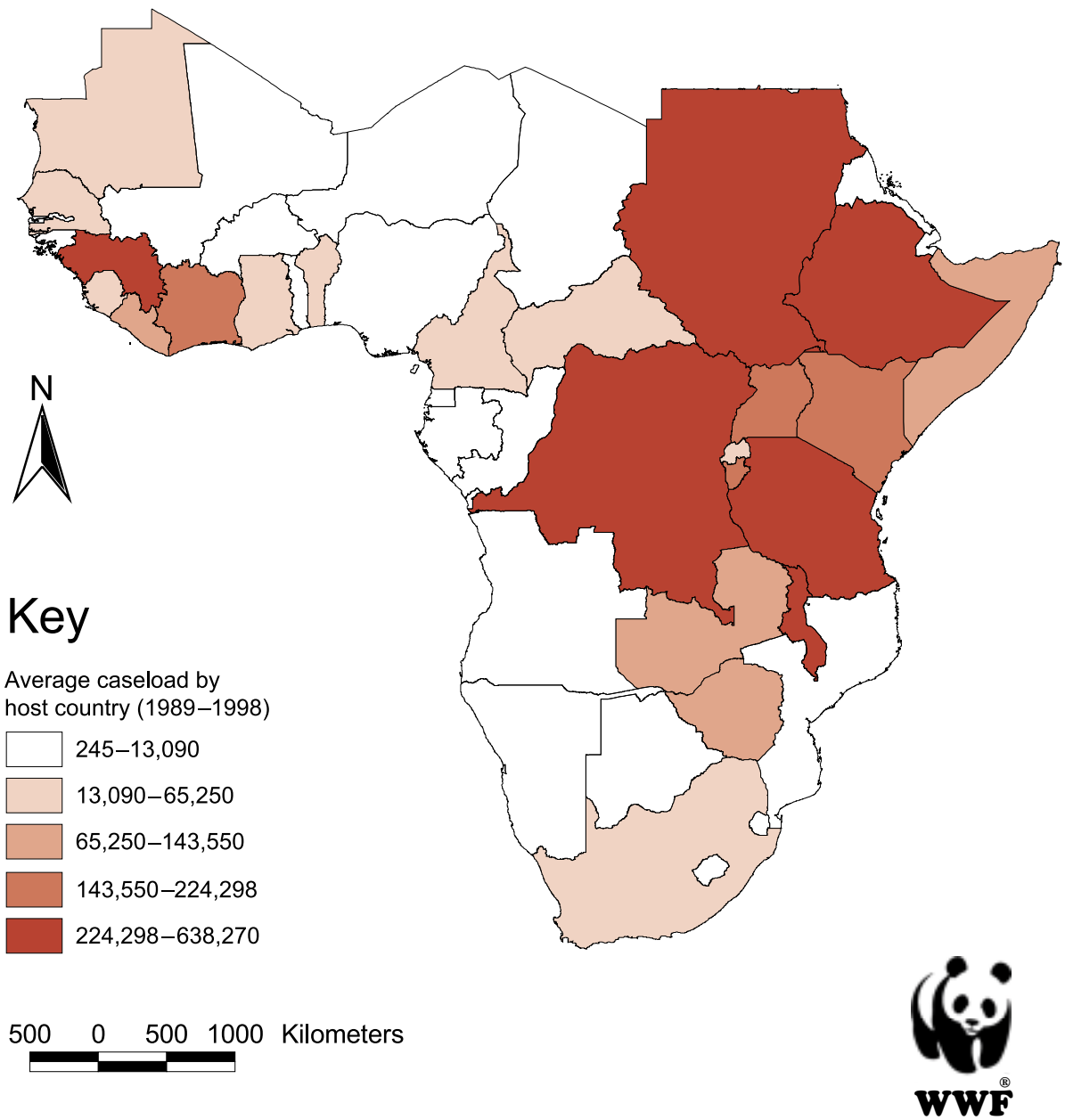
Baseline data: ESRI. 1993. Digital chart of the world. Redlands, CA: Environmental Systems Research Institute.

MAP 2 — COUNTRIES OF SUB-SAHARAN AFRICA EXPERIENCING ARMED CONFLICT AT SOME TIME DURING 1989–1998



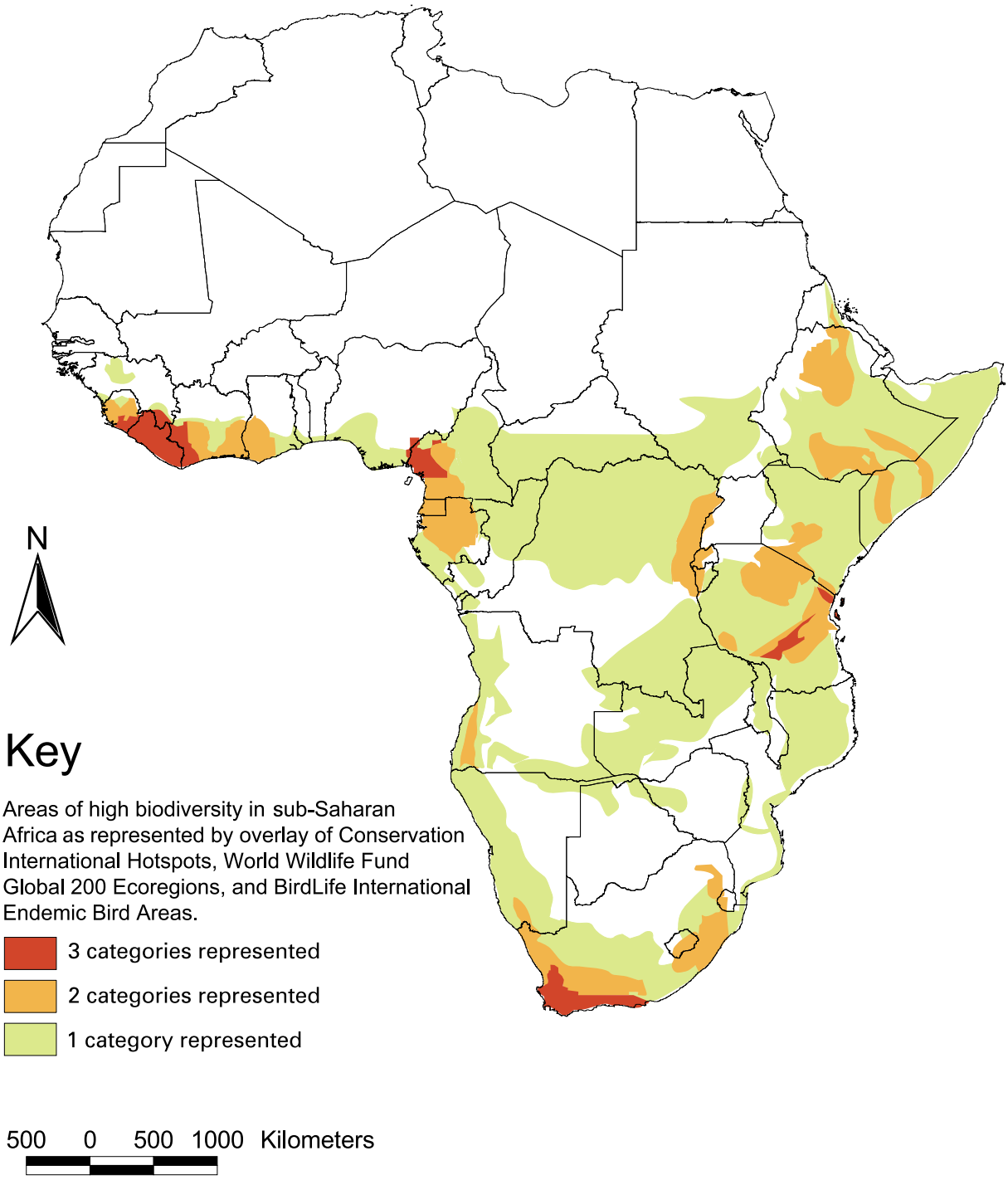
Baseline data: ESRI. 1993. Digital chart of the world. Redlands, CA: Environmental Systems Research Institute.
Conflict data: Rebecca Ham

MAP 3 — COUNTRIES OF SUB-SAHARAN AFRICA HOSTING REFUGEES DURING 1989–1998



Baseline data: ESRI. 1993. Digital chart of the world. Redlands, CA: Environmental Systems Research Institute.
Refugees data: UNHCR (2001).

MAP 4 — AREAS OF HIGH BIODIVERSITY IN SUB-SAHARAN AFRICA



Baseline data: ESRI. 1993. Digital chart of the world. Redlands, CA: Environmental Systems Research Institute.
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