

EarthTrends Featured Topic: Armed Conflict, Refugees, and the Environment

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Along with the destruction of lives and livelihoods, war can also destroy croplands, forests, water systems, and other natural resources. Clean air and soils were casualties of the 1990–91 Gulf War after being polluted when Iraqis intentionally ignited hundreds of oil wells. Marine and coastal life was damaged too; spills of 6–8 million barrels of oil into the Persian Gulf and Arabian Sea killed 15,000–30,000 sea birds and contaminated mangroves and coral reefs (UNEP 2002:14, 204, 292; Omar et al. 2000:317). When Serbian forces systematically destroyed villages and towns in the 1999 Kosovo conflict, they also destroyed clean drinking water supplies and waste systems (UNEP and UNCHS 1999:5). And though decades have passed since U.S. forces cleared 325,000 hectares in the Viet Nam War by

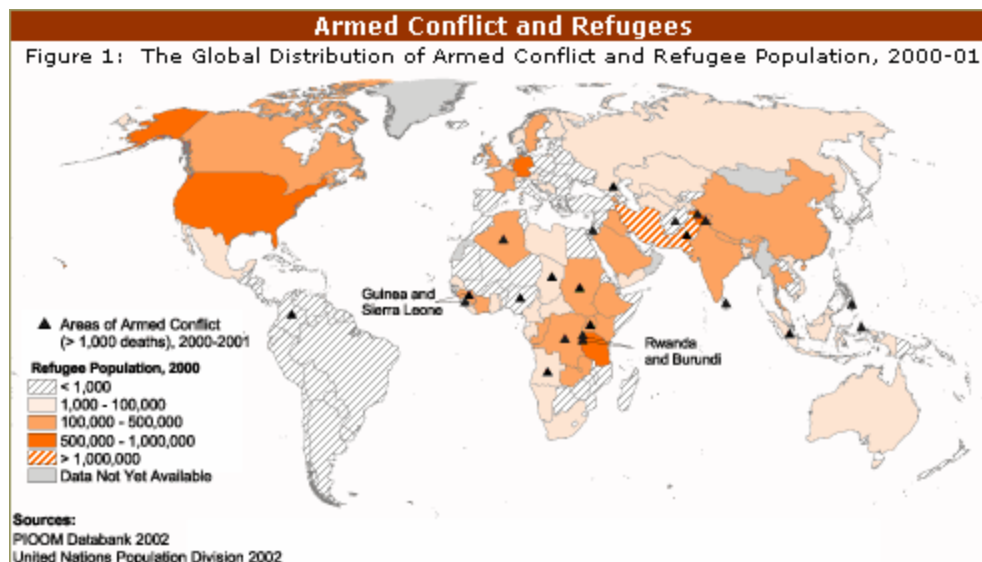
spraying the defoliant Agent Orange, biodiversity losses are still very much in evidence. Areas once covered by forests and mangroves now support just low-density grasslands and mudflats (McNeely 2000:362).

The toll on environmental governance is just as significant. War often destroys or weakens the institutions that make inclusive and informed decisions about the environment possible. The political and social turmoil that accompanies conflict can short-circuit systematic processes of environmental management. War creates refugees, leaves government and environmental agencies handicapped or destroyed, and substitutes short-term survival for longer-term environmental considerations. This means that ecosystems continue to suffer even after the fighting has stopped.

War or “armed conflict” is a governance problem for a distressingly large number of

people, ecosystems, and institutions. Between 1990 and 2000, 118 armed conflicts worldwide claimed approximately 6 million lives (Smith 2001:1). People and the environment suffered the consequences for years after the wars ended. In 1999, more than two thirds of the ongoing conflicts had lasted for more than 5 years, and almost one third had lasted for more than 20 years (Smith 2001:3).

Most current wars are fought within national borders, not between nations, but the effects often spill over to neighboring countries (CAII 1997; SIPRI 2002). Resource wealth is usually a factor in the violence, with competition for valuable resources like gold, diamonds, and timber driving the conflict. By one estimate, one quarter of the roughly 50 wars and armed conflicts active in 2001 were triggered, exacerbated, or financed by legal or illegal resource exploitation (Renner 2002:6).



Disrupted Governments

During and after conflict, governments generally focus on meeting immediate human needs—food, shelter, and safety for citizens and displaced populations. Protection of the environment and sustainable resource management are inevitably relegated to lower priorities. Food shortages, disease, weakened health care systems, fragmented social networks, the destruction of people's livelihoods, and refugees who must be returned to their own homeland all take precedence over environmental concerns.

Even after conflict ends, well-informed environmental decisions are unlikely in the face of economic collapse, the need to rebuild infrastructure, and the disruption of commerce at the local, national, and international levels—common outcomes of armed conflict (CAII 1997; Kalpers 2001:21). War economies and destabilized governments perpetuate an ongoing cycle of violence and resource exploitation. Land and natural resources may be used as bargaining chips to gain allies during strife, in negotiations to end conflict, or as postwar paybacks to those who helped win the conflict. Little value may be accorded to intact ecosystems or ecosystem services in the process (Shambaugh et al. 2001:12–17).

In times of conflict, governments and warring factions need money to buy arms and supplies; high-value resources such as ivory and diamonds can readily satisfy that demand. This dynamic has worked to the detriment of elephant populations in strife-torn countries such as Sudan, Chad, and the Central African Republic. It has also driven forest liquidation in Liberia and Sierra Leone (Blom and

Yamindou 2001:13; Shambaugh et al. 2001:7). After the conflict ends, governments need to kick-start the economy and rebuild key sectors, and one of the quickest ways is to mine natural resources.

Armed conflict can wreak havoc on government conservation efforts, especially in protected areas (Matthew et al. 2002:22). For example, during the Ethiopian-Eritrean war, parks and reserves lacked funds for staff, infrastructure, research, and management training (Jacobs and Schloeder 2001:19). In countries where nature tourism provides a major source of income for biodiversity protection, that source quickly evaporates when conflict begins. In Rwanda, income generated by tourists—many of whom come to see mountain gorillas—totaled about \$4–6 million annually; this in turn funded conservation projects in parks and forest reserves. However, escalating conflict in the 1990s, and the 1994 genocide caused tourist numbers to plunge; they still have not fully recovered (Plumptre et al. 2001:19).

War often leads to the breakdown of law and order, leaving protected areas and species vulnerable to exploitation. During Sierra Leone's civil war in the 1990s, regional forestry officers, foresters, rangers, and guards went unpaid for long periods, while illegal mining and logging—and massive deforestation—occurred in forest reserves (Squire 2001:21–22). And while the Ethiopian-Eritrean war raged, game hunting by the military in protected areas continued (Jacobs and Schloeder 2001:23). In the Central African Republic, hunting and poaching in war-torn provinces reduced the country's elephant numbers by 90 percent to just 5,000 and led to the disappearance of the rhinoceros (Blom and Yamindou 2001:14). And in Cambodia, the Khmer Rouge's trade in timber

brought \$10–20 million a month in funds for its civil war effort (Global Witness 2003).

Even after wars end, weakened political institutions may not have the authority, ability, or funds to effectively manage their country's natural resources (Orr 2002:139). Some reconstruction efforts may include environmental projects, but they are not likely to be a priority. Environmental ministries often lack the capacity to address environmental problems in any systematic way. The postwar turmoil can mean fragmented government ministries and new staff unaccustomed to working together or with other institutions. Years after the end of conflict in Bosnia and Herzegovina, environmental groups noted that new environmental legislation was forthcoming, but doubted the fledgling government's ability to implement and enforce it (REC 1997:35). Local governments may be equally shattered, making it difficult to decentralize the management of natural resources effectively. Two decades of conflict in Afghanistan left local community decision-making bodies without the information, infrastructure, money, or human capacity to cope with demands on the environment (UNEP 2003:95).

Refugees and the Environment

Refugees searching for safe haven can burden the ecosystems in their country of asylum and complicate environmental decision-making. In 2001, there were about 20 million uprooted people worldwide. Some 12 million were refugees and 5 million were “internally displaced persons”—people forced to flee their homes, but still living in their original country (UNHCR 2002:12, 19, 22).

Often, refugees are forced to settle in resource-scarce areas, putting further pressure on trees, land, water, and wildlife. The unstable in- and outflow of

displaced people affects established patterns of rural cropping and food production, and upsets long-term agricultural investments (Messer et al. 2000). When rural communities are forced to flee, they may take with them knowledge of the harvest cycles of locally adapted seeds and the informal networks of seed swapping that help preserve the genetic diversity of agriculture (PRTADG 1999:12–14). Streams of refugees can overburden infrastructure for living quarters, clean water supplies, and waste systems.

When it is time to make decisions about natural resource use and conservation, refugees are unable to have a voice in those decisions because they are not citizens. Even if they return to their original homes, they may lose their say in land use and management decisions due to land ownership disputes or postwar changes in national land policy. For example, in postwar Mozambique, the government awarded commercial land concessions in many areas when local communities were still absent or were struggling to re-establish their livelihoods, and were thus unable to effectively join in the decision (Hatton et al. 2001:64). In addition, documentation regarding legal land rights and property ownership is often misplaced or confiscated during conflicts, as occurred in the southern Balkans when Kosovo Albanians fled to Albania and the former Yugoslav Republic of Macedonia in 1999 (UNEP and UNCHS 1999:5).

Civil Society Undermined

Civil society, so crucial to informed environmental management, is weakened during war. War thwarts the ability of nongovernmental

organizations (NGOs) and the media to operate. It also makes it harder for people to assemble, to communicate within and outside borders, and to access information. Growth rates of NGOs have typically fallen during times of conflict and grown in the years after the fighting stops. In Bosnia and Herzegovina, for example, environmental NGOs thrived at local, municipal, regional, and national levels before military violence began. Local governments funded some of the work of various agricultural organizations, and NGOs had a voice in decisions that affected the environment and routinely worked with governments, religious groups, and scientific institutions. During the war, however, most NGOs were forced to cease their operations or were limited to local endeavors (REC 1997:35).

Conflict can mean the end of external funding and participation in environmental work. During wartime, foreign funders typically hesitate to support local NGOs. International organizations once active in environmental education, restoration, biodiversity monitoring, and natural resource management may pull out staff, abandon projects, or see their work destroyed by conflict, as experienced in Sierra Leone, Ethiopia, the Central African Republic, and other countries (Squire 2001:24). For example, the headquarters of a World Bank-sponsored project to manage natural resources in the Central African Republic was destroyed as a result of conflict, along with a large quantity of equipment, including the entire geographic information system (GIS) database of forest inventories covering the southwestern area of the country. The project was suspended and then discontinued (Blom and

Yamindou 2001:18).

While government ministries and civil society groups are in disarray after conflict ends, the private sector is often able to mobilize quickly to take advantage of this void. After the Mozambique Peace Accord in 1992, for example, hunters and commercial loggers from urban areas followed construction teams as the road network was re-established, taking advantage of the new access to wildlife and forest areas. The quick profits they reaped left communities in the province a poorer resource base on which to rebuild their livelihoods (Hatton et al. 2001:11, 47–48).

The Defeat of Sustainability

Clearly, a country at peace is more likely to have the political, economic, and civil stability that fosters sustainable development. Simmering conflicts and eruptions of violence slow economic growth, and reduce the latitude for innovation and investment. Civil conflicts in Africa have deterred progress in introducing greater transparency and accountability into governments—critical to democratic and sustainable development. Political instability and conflict can result in a chronic lack of investment in environmental protection by governments, citizens, and businesses. In the Arabian Peninsula, political and military conflicts have hurt water sector development, contributing to water scarcity and the deterioration of water quality (UNEP 2002:175).

On the other hand, the aftermath of conflict can sometimes yield opportunities for improved policy-making and a fresh outlook that can actually benefit a nation's environmental prospects. This happened in Uganda and Mozambique when natural resource legislation enacted under new leadership enabled

much greater opportunity for community participation in natural resource management (Oglethorpe 2002). In 2001, a new government in Afghanistan created a ministry for environmental management—the first time in the history of the country (UNEP 2003:92).

Under certain conditions, the disruptions of war can even work in the environment's favor (Matthew et al. 2002:42).

Pressures for development and forest conversion may diminish as populations flee strife-torn areas, and resources may become inaccessible for exploitation in areas the military designates as off-limits.

However, these benefits are entirely accidental and inadvertent, and rarely offset the direct environmental damage and destruction of the social and economic fabric that war brings (McNeely 2000:365).

Amid war's brutality, death, and deprivation, the environment may seem a minor casualty. Yet, the destruction of the environment, along with the demolition of democratic, informed decision-making, can prolong human suffering for decades, undermining the foundation for social progress and economic security.

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