

When conflict affects forests

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Conflict and political instability often provide challenges to sustainable forest management.

Armed conflicts frequently erupt in or near tropical forests (Kaimowitz, 2001), which are often remote from centres of government, rich with natural resources and capable of concealing armed forces. Often forests are the hub of disputes between local communities that have long relied on the forests for their livelihoods and outside groups – whether revolutionary, government or corporate – that have realized the potential economic benefits of exploiting them. Worldwide, forests contribute to the livelihoods of most of the world's poorest 1.2 billion people, according to the World Bank (Schroeder-Wildberg and Carius, 2003). Where laws governing access to those forests are vague or ineffectual, there are serious risks of violent conflict.

How do conflicts impact forests?

The struggle for access to forest land can itself damage forests. In 1997-1998, fires in Indonesia, many of them set deliberately, scorched an estimated 9.7 million hectares (Applegate, Chokkalingam and Suyanto, 2001). Long-time residents were using fire in the process of clearing forest and scrub land, as a kind of legal tool to reclaim their historic rights to land given in forest concessions; under Indonesian law, smallholders can access cleared forest or farmland much more easily than natural forests or palm plantations. The struggle among companies, government and local people left both natural forests and plantations in ashes.

Even when forest exploitation is not the focus, prolonged internal conflict can negatively affect forests. Intentional clearing or destruction of forests is a warfare tactic often used to deprive enemies of cover, as when the United States used the defoliant Agent Orange in Viet Nam. Also, where conflict has rendered State agencies ineffective, peacetime efforts at forest protection are suspended, and illegal loggers, even if not directly involved in the conflict, can proceed unchecked. In the Democratic Republic of the Congo, a series of civil wars in the 1990s

created a power vacuum and broke down conventional forest management regimes, fostering illegal logging and other resource conflicts (Renner, 2002).

Conflicts often displace large populations from their homes into neighbouring regions and countries. The increased burden on forests in the receiving areas to supply food, shelter and fuel can be overwhelming, and these primary needs usually override goals of sustainable resource management. In 1994, almost 2 million refugees fled the genocide in Rwanda, many arriving in eastern Zaire (present-day Congo). There they consumed up to 1 000 tonnes of fuelwood every day, denuding large forest areas (Renner, 2002). A similar situation occurred with the influx of Afghan refugees in border areas of Pakistan.

Conflict can also have positive impacts on forests, at least in the short term. This can happen if, for example, an army enforces forest protection more rigorously than the peacetime regime. An army might exploit the forest for its own needs, which may be less intensive than commercial logging. Furthermore, the presence of armed forces may discourage illegal logging by outsiders, as well as poor logging practices by legal operators. In Colombia, land mines have had the inadvertent effect of protecting the forests to some degree, and guerilla groups have used the threat of violence to practise "gunpoint conservation" (Álvarez, 2003). Nevertheless, in the long term conflict does not foster sustainable resource management, which depends on stakeholder involvement and ensuring that local populations as well as national economies benefit.

What are the broader consequences of these conflicts?

The fires in Indonesia mentioned above destroyed ecosystems and a wealth of tropical species diversity. They also had immediate negative effects on human health, with consequences that crossed borders: the fires blanketed much of Southeast Asia with a

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thick haze that caused severe respiratory problems for over 60 000 people, and affected more than 75 million in all, not just in Indonesia but also in Malaysia and Singapore (Taylor, 1997; Applegate, Chokkalingam and Suyanto, 2001).

Demographic changes caused by conflicts can in turn have important long-term impacts on forests. The worst may occur only after a conflict ends. Post-conflict settings can be scenes of resource grabbing (Kaimowitz, 2001); forest concessions may be granted to appease former foes or reward supporters. For example, when a corrupt administration came to power in Liberia after years of civil war, it authorized a few companies to harvest timber in many parts of the country without adequate regulation, and authorized them to recruit private militias to protect their operations. In exchange, the firms provided the government with timber used as barter for weapons (Thomson and Kanaan, 2003).

The goals of national reconstruction often demand increased timber revenues and reduce the political will for sustainable forest management. After the recent war in the Democratic Republic of the Congo, the

government allocated concessions for over one-third of its forest area, without due attention to silvicultural safeguards in contractual agreements.

The political will required for sound, long-term forest management may often rest on the prospect of a stable future. When conflict brings instability, communities and forest managers face even more daunting challenges than usual.

Bibliography

Álvarez, M.D. 2003. Forests in the time of violence: conservation implications of the Colombian war. *Journal of Sustainable Forestry*, 16(3/4): 49-70. Available on the Internet: www.columbia.edu/~mda2001/FV.html

Applegate, G., Chokkalingam, U. & Suyanto. 2001. *The underlying causes and impacts of fire in Southeast Asia*. Bogor, Indonesia, Center for International Forestry Research (CIFOR).

Giro, P.O. 2002. Environmental degradation and regional vulnerability: lessons from Hurricane Mitch. In M. Halle, R. Matthew

& J. Switzer, eds. *Conserving the peace: resources, livelihoods and security*, p. 275-323. Winnipeg, Canada, International Institute for Sustainable Development (IISD).

Kaimowitz, D. 2001. Get serious about averting trouble in the forest. *International Herald Tribune*, 30 November, p. 8.

Organization of American States (OAS). 2003. *Declaration on Security in the Americas*. OEA/Ser.K/XXXVIII, CES/DEC. 1/03 rev.1. Washington, DC, USA.

Renner, M. 2002. *The anatomy of resource wars*. Washington, DC, USA, WorldWatch Institute.

Schroeder-Wildberg, S. & Carius, A. 2003. *Illegal logging, conflict and the business sector in Indonesia*. Berlin, Germany, InWEnt.

Taylor, D. 1997. Seeing the forests for more than the trees. *Environmental Health Perspectives*, 105(11): 1186-1191.

Thomson, J. & Kanaan, R. 2003. *Conflict timber: dimensions of the problem in Asia and Africa*, Vol. 1, *Synthesis report*. Burlington, Vermont, USA, Associates in Rural Development.

Forest degradation threatens national security

When Hurricane Mitch struck Central America in October 1998, that region's mountainous environment had been badly disturbed by decades of migration of human populations into forest areas and fragile lands, with consequent deforestation and erosion caused by inappropriate farming methods, exacerbated by decades of conflict and wars in Guatemala, El Salvador and Nicaragua. Thus when Hurricane Mitch struck, the flooding and landslides probably had a greater human cost than they would have had otherwise. The storm caused over 10 000 deaths, forced 2 million people from their homes and left millions

more without safe drinking-water. The disaster overwhelmed the region's public health system and infrastructures for transportation, water delivery, waste disposal, energy and telecommunications. It caused an estimated US\$4 billion in direct damages to Central America's forestry, agriculture, fisheries and industrial sectors, stretching national governments to the brink of failure (Giro, 2002).

National leaders were sobered by that disaster and recognized the causes rooted in environmental deterioration. Since then, there has been increasing recognition of the links between forest management and na-

tional security. In October 2003, ministers of defence and foreign affairs representing the 34 member countries of the Organization of American States acknowledged these links in a joint declaration that repeatedly identified forest and other environmental degradation as a potential "threat, concern, or challenge to the security of States in the Hemisphere" (OAS, 2003). For forest managers, this recognition may translate into greater political support for clear land-tenure policies and sound forest management.