

FORESTS, FRAGILITY AND CONFLICT

OVERVIEW AND CASE STUDIES



PROFOR
PROGRAM ON FORESTS

FORESTS, FRAGILITY AND CONFLICT

OVERVIEW AND CASE STUDIES



Authors: **Emily Harwell**
Douglas Farah
Arthur G. Blundell



PROFOR
PROGRAM ON FORESTS

Acknowledgement

This work was funded by the Program on Forests (PROFOR), a multi-donor partnership managed by a core team at the World Bank. PROFOR finances forest-related analysis and processes that support the following goals: improving people's livelihoods through better management of forests and trees; enhancing forest governance and law enforcement; financing sustainable forest management; and coordinating forest policy across sectors. In 2011, PROFOR's donors included the European Commission, Finland, Germany, Italy, Japan, the Netherlands, Switzerland, the United Kingdom and the World Bank. Learn more at www.profor.info.

Disclaimer

This volume was prepared by the PROFOR Secretariat in Washington DC. All omissions and inaccuracies in this document are the responsibility of the authors. The views expressed do not necessarily represent those of the institutions involved, nor do they necessarily represent official policies of PROFOR or the World Bank.

Suggested citation: Program on Forests (2011), *Forests, Fragility and Conflict*, Washington D.C.

Published in June 2011

Printed on 100% Recycled paper

Material in this book can be copied and quoted freely provided acknowledgement is given.

For a full list of publications please contact:

Program on Forests (PROFOR)

1818 H Street, NW

Washington, DC 20433, USA

profor@worldbank.org

www.profor.info/profor/knowledge

TABLE OF CONTENTS

ABOUT THE AUTHORS	1
FOREWORD	3
OVERVIEW	5
CHAPTER 1.	19
Forests, State Fragility, and Conflict <i>Emily Harwell</i>	
CHAPTER 2.	67
Transnational Crime, Social Networks, and Forests: Using natural resources to finance conflicts and postconflict violence <i>Douglas Farah</i>	
CHAPTER 3.	113
The Financial Flows that Fuel War <i>Arthur G. Blundell</i>	
CHAPTER 4.	157
Forests, Ex-combatants, and Durable Security: Cross-sectoral implications of postconflict programming <i>Emily Harwell</i>	

ABOUT THE AUTHORS

EMILY HARWELL is a partner with Natural Capital Advisors, LLC with nearly two decades of experience researching natural resource conflict, customary rights and ethnic identity, human rights, and governance reform. She was Research Coordinator for the East Timor Commission for Reception, Truth and Reconciliation, and Senior Researcher on the Commission's work on the role of natural resources in social and economic rights violations. She has consulted for numerous groups including Human Rights Watch, the International Crisis Group and the United Nations Development Programme. She has taught at Yale University, George Mason University, and Middlebury College. She earned her Ph.D. at the Yale School of Forestry and Environmental Studies.

DOUGLAS FARAH, a Senior Fellow at the International Assessment and Strategy Center, is a national security consultant and analyst based in Washington DC. A prize-winning former correspondent and investigative reporter for *The Washington Post*, Farah has written extensively about death squads, drug cartels and other organized crime. In November 2001 he broke the story of al Qaeda's ties to diamond and weapons networks and had to be evacuated with his family from West Africa because of threats against his life. He is the co-author of *Merchant of Death: Money, Guns, Planes and the Man Who Makes Wars Possible* (2007) and the author of *Blood from Stones: The Secret Financial Network of Terror* (2004).

ARTHUR G. BLUNDELL was Chair of the Panel of Experts on Liberia, monitoring sanctions for the UN Security Council. He is now helping to negotiate Voluntary Partnership Agreements (VPA) with timber producing countries as part of the European Union's effort to develop a legal-timber procurement policy. Previously, he worked with the African Development Bank to incorporate forestry into the Extractive Industries Transparency Initiative, and in Washington DC for the Environmental Protection Agency, focusing on risk assessment. He was also a Science-Diplomacy Fellow of the American Association for the Advancement of Science working with USAID. He works with the Biodiversity Neutral Initiative and Natural Capital Advisors, LLC. He lives in Vancouver and has a Ph.D. from Dartmouth College and a BSc (Hons) from UBC.

FOREWORD

Much of the world has made progress in building stability and reducing poverty in the past 60 years, but areas characterized by repeated cycles of political and criminal violence—and by fragile state and societal institutions—are being left far behind. Organized crime and gang activities, civil war, political conflict, and terrorism prevent citizens around the world from pursuing legitimate social and economic opportunities for themselves and their families. More than 400 million such people are living in poverty because of conflict.

Conflict thus remains a central development concern for the countries with which the World Bank works, in all regions and at all income levels. This year, the Bank has raised the issue of conflict in its flagship 2011 *World Development Report*. The report's goal is to showcase new thinking and contribute concrete, practical suggestions for addressing conflict and state fragility.

One subset of this broad inquiry focuses on the links between natural resources and conflict, particularly civil war. Most research has focused on oil and diamonds, leaving the links between forests and conflict largely unexamined. This collection of background papers to the *World Development Report* offers a synopsis of these links. It also raises key questions, especially on managing forests in postconflict situations.

It finds that forests tend to be at the center of mainly localized, nonviolent struggles for controlling their access, use, and benefit streams. But forests can—particularly through corruption and looting of forest timber—facilitate and prolong violent conflict. Forests themselves may be at risk in the immediate aftermath of conflict, when myriad demands—from government, local populations, commercial timber operations, as well as donors—go uncoordinated. As the world continues to lose roughly 13 million hectares of forest each year, and the extraordinary value of the remaining functional ecosystems becomes apparent to key economic and political actors, wars over the remaining standing trees may yet break out.

It is the writers' hope that this volume's analysis, case studies, and lessons will help policy makers, offering some understanding of the reasons for the repeated cycles of violence—based on human grievances and environmental degradation—that keep so many people in poverty.

Sarah Cliffe and Nigel Roberts,

Coauthors of the 2011 *World Development Report*

OVERVIEW

Resource-dependent countries seem cursed. Civil war is strongly correlated with a country's ratio of primary exports to gross domestic product—and lootable commodities, like precious metals and rough diamonds, appear to prolong conflicts, once started. Even forestry can fuel conflict when belligerents control territory rich in timber and can provide sufficient security to log and market the timber. Logging seems to have contributed to conflict in at least Cambodia, Côte d'Ivoire, the Democratic Republic of Congo, Myanmar, and most notably Liberia. Indeed, the United Nations Security Council imposed sanctions on timber from Liberia in 2003 as a means of stanching the flow of revenue to the belligerents in that regional conflict.

The stresses that forestry places on a country increase the risk of violence. The major pathways for revenue from forestry to contribute to the outbreak, escalation, and continuation of armed conflict include:

- Forestry fuels corruption, undermining rational management and economic development, thus increasing the risk of conflict.
- Revenue from forestry is used directly to fuel conflict.
- Logging operators participate directly in conflict by, for example, trafficking weapons.
- The security forces paid by logging operators also participate directly in conflict.
- The forestry sector facilitates money laundering and other financial crimes.

Where belligerents can secure forest-rich territory and the trade routes to market the timber, some combination of these stresses can help to push a country into civil war, or at least prolong it.

Countries where conflict timber is important appear to share several characteristics. Land ownership is contested, often violently. Indigenous ownership of communal land is unrecognized. Even private ownership can be contested when those forced off their land during the war return to find that others have taken up residence or are using the land. And once the conflict is over and security returns, fights over forest rights can be especially fierce when the rights holders stand to profit from logging if they can regain control.

Rights to logging awarded during the conflict are also contested, especially when claims overlap on concessions. Overlapping claims are generally the result of the corrupt allocations of logging rights, which are often awarded as patronage for loyalty or for crucial assistance, like facilitating weapons shipments.

Failure to deal with the stresses that the forestry sector generates can have dire effects: for example, more than a third of countries recovering from civil war revert to conflict within a decade, often because belligerents can gain revenue from the illicit exploitation of natural resources. When the United Nations Security Council

placed sanctions on timber from Liberia, it recognized the country's limitations in dealing with these stresses, limitations that persisted even after the conflict had officially ended. It lifted the timber sanctions only three years after war's end. Those three years were vital in building the constituency for change and thus changing expectations for the forestry sector. The sanctions were also critical in generating the political will to undertake reforms, though most were opposed by spoilers.

Fragile states, defined by their failure to deliver security and basic services to their citizens, suffer from a complex array of weaknesses—in economic management, political legitimacy, regulatory quality, social inclusion, and institutional effectiveness. These weaknesses can lead to violent conflict, but the precise mechanisms are frequently underexplored.

Extensive areas of the world's forests are found in countries assessed to be failed states or at moderate risk of becoming failed states. In addition, forests are valuable to local subsistence livelihoods, timber and other commercially valuable forest products, as well as ecosystem services including forest carbon and biodiversity. This makes the linkage between forests and state fragility of huge importance to local poverty reduction, national and global trade, and global public goods such as forest carbon and biodiversity. Understanding and mitigating pressures on forests in fragile states also clearly have important implications for the donor community's interventions in both the forestry sector and conflict and postconflict programming.

This book provides a synthesis of key themes and current knowledge about the links among forests, armed conflict, poverty, and various aspects of state fragility.

The main themes:

- How predatory, incapable, or absent states are “fragile” in different ways, and their diverse relationships to forests and conflict.
- The mechanisms by which forests facilitate or prolong conflict, including financial flows from logging to state and nonstate belligerents, the use of forests as patronage, the traffic of weapons by loggers, and the employment of belligerents by logging companies for security.
- The impact of conflict and fragility on forests and forest livelihoods, with a focus on cross-sectoral issues associated with managing forests after conflicts end.
- The focus of reform in postconflict interventions to more effectively protect forests and forest-based livelihoods, and to mitigate further conflict.

Because forests have multiple and often competing constituencies for commercial, subsistence, and cultural uses, they are frequently at the center of struggles over control of access and use. While these contests can be widespread, they tend to be nonviolent, or if violence breaks out it tends to be localized. Indeed, the quantitative evidence shows that countries with large amounts of forest (either in total area or as a proportion of national territory) are no more likely to experience civil war than those without forest.

There is, however, an association between the likelihood of conflict and the size of the forest industry. And for countries experiencing civil war that have other extractive resources available, the abundance of forest increases the duration of the conflict. This effect is heightened with increasing accessibility of forest. That is, forests do not cause conflict, and armed conflicts tend not to be fought *over* forests. Instead, armed conflicts are often *exacerbated by* certain aspects of forest use, especially when forests are "lootable" (requiring low cost and low skill for extraction).

Links between conflicts and resources: What is unique about forests?

So what characteristics of forests and timber mitigate their role in causing armed conflict but exacerbate their likelihood to prolong it? In considering the relevance to conflict and fragility, the critical differences between forests and such resources as oil and diamonds include:

- Forests (and the land beneath them) are critical to local livelihoods, especially the most vulnerable—women and the rural poor. Forests are often valuable to national and global economies, and for global public goods such as forest carbon and biodiversity. These competing values can cause grievance and conflict (not necessarily armed, though it can become violent) when one is prioritized to the detriment of another.
- Forests provide shelter and a protected pathway for movement of rebels, which may prolong conflicts and drive the government into accommodations with loggers to drive insurgencies out.
- Forests are lootable, especially when near roads, coasts, or navigable rivers. The footprint of logging operations is much more diffuse than point sources like oil and mining, often giving forestry a large impact on livelihoods as well as making it more difficult to control, thus providing a revenue source for insurgencies, criminal gangs, or states whose revenue sources have been cut by sanctions. The diffuse footprint also necessitates security forces for remote operations, which often act unaccountably and may even be combatant forces themselves, directly contributing to violence.
- Timber is bulky and easily detectable, making it fairly easy to monitor, and thus susceptible to informal "taxation" at transport bottlenecks (for those with capacity for territorial control, whether state or nonstate), providing revenue for conflict.
- While timber is difficult to hide, its illegality is more easily concealed. Timber traffic can be harder to police than such commodities as drugs or wildlife, because illegal timber can be easily mixed with legal timber, requiring detailed systems for verifying legality of origin and permits, and expertise to identify restricted species. This makes control of illicit revenue sources difficult.

These aspects that contribute to conflict can be offset by characteristics that might reduce it:

- Timber has a low value-to-weight ratio, which means that there are fewer discipline problems than with more easily smuggled resources (diamonds, for example). It has lower overall value (than, for example, oil and precious minerals), which means that there are fewer spoilers of the peace willing to prolong violence purely for economic reasons solely related to timber.

- Timber is vulnerable to commodity boom and bust cycles but is also more easily discovered, and prices are less volatile than for oil (but more than for diamonds). So there are fewer destabilizing impacts from dramatic windfalls and declines.
- End users of timber products are becoming more discriminating about sourcing and legality, making certification more attractive as a means to distinguish wood sourced from “good actors” and “bad actors.”

Last, trees are renewable but take time to grow, which requires planning and investment over time for sustainable management. Without incentives for long-term investment, unaccountable companies and short-sighted governments will be tempted to strip lootable forests. These safeguards are especially important during the postconflict rush to generate revenue for recovery.

Different types of state fragility

Just as resources are not all the same, nor are fragile states. The different types of fragility can lead to different dynamics in relation to use of forests and their role in prolonging armed conflict.

In *strong but predatory states*, governments are not incapable but are unwilling—their elites focus their capacities on consolidating personal power through patronage relationships with the private sector and with a wide array of specialized criminal networks (rather than on the public good). The use of forest concessions for this form of patronage undermines the rule of law and the development of governance institutions. It encourages the expansion of shadow economies, while undermining the sustainable use of forests. It reduces access for local livelihoods. It short-circuits accountability, generates grievance, and undermines state legitimacy. And at its worst it fuels a resumption of violence.

Fragility can also lead to the emergence of *weak states* with regions virtually beyond government control. Not all areas of state absence are violent, but those that are appear characterized by abundant, accessible lucrative resources, especially those with large global demand. The resources are in a location remote from the capital, but close to a border porous to the flow of goods and people. There is a history of ethnic or religious polarization (or both). And vulnerability is high to external influences. Forest extraction is not “uncontrolled” by the state, but instead, tightly controlled by nonstate forces.

Both scenarios—of strong but predatory and of weak states—set the stage, albeit in different ways, for forests to contribute to armed conflict, and for forests to come under pressure from conflict, to the detriment of local, national, and global communities depending on these natural assets.

Stress factors and societal capacity

In the three cases of Colombia, Guatemala’s timber-rich Petén region, and Liberia, significant internal stress factors compounded the problem of weak state presence. These included ready access to cheap weapons, since guns allow the many unemployed young men (especially among disenfranchised ethnic or religious minorities) to control territory that contains a “honey pot,” which in turn allows the armed group to endure.

An abundance of lootable natural resources such as timber, alluvial gems, or minerals were also identifiable in each case, as were external shocks.

Focusing on these shocks, one sees that in Liberia the role of Libya in fomenting and funding revolution and training its leaders (including Taylor) as well as the geopolitical situation of the country (the United States maintained several important regional intelligence facilities) were vital in aiding Taylor. In turn the “spillover” of Taylor’s campaign of criminality destabilized neighboring Sierra Leone, Côte d’Ivoire, and Guinea.

In the Petén the external shocks largely center on the drug trade in neighboring Mexico, the traffic of illegal immigrants into the United States, and the vast expansion of the cocaine pipeline, which in turn strengthened the capacity of criminal networks to engage in other activities such as illegal logging.

The increase in demand for palm oil in Colombia and its rising price in the international market (especially in the wake of increased petroleum prices and geopolitical concerns over oil dependence) are external stress factors that make the seizure of land for palm plantations economically viable. As press reports documented, stress factors include the payment of millions of dollars in development aid, much of it provided by the United States under Plan Colombia, to wealthy families in isolated regions where the palm is grown. This likely further strengthens the substate actors active in the region’s violence for many decades.

In all three cases the demand from international markets and the general lack of discrimination by consumers have contributed to driving criminal cycles of commodity traffic.

Each society’s capacity to respond to stress varies but tends toward the extremely limited. Guatemala’s capacity to confront nonstate actors has been very weak. The state has consistently ceded ground to them in recent years. In Colombia, where leadership has recently been very strong, the situation is complicated and fragile, with the institutional ties of the paramilitaries weakening. At the same time, the state is pushing to expand African palm but is scarcely protecting the most vulnerable communities. Liberia, remarkably, has shown the greatest capacity to respond, albeit with an enormous amount of international assistance, including UN peacekeepers who helped to break the conflict cycle. The role of UN sanctions was also very important in driving reforms and in freezing assets and making travel harder, though savvy international criminal networks continue to find ways to avoid these restrictions.

Repeated cycles of violence

In each case the legacies of prior conflicts and current state fragility have significant consequences. The lack of a positive state presence has led to governance by violent nonstate actors in broad areas of national territory and the entrenchment of transnational criminal organizations more powerful than the state.

The available pool of highly trained and often unemployed young men has made recruiting capable fighters easy and cheap, so that different economic and political groups can hire the muscle they need to protect their interests. This not only perpetuates the culture of violence, but often leads to turf battles and protection rackets to ensure an economic stranglehold on parts of the economy.

These repeated cycles also make it ever harder to establish positive state control because of the parallel culture of impunity that often grows in the shadow of the violence. Honest officials can be intimidated or killed, the justice system overrun, the rule of law destroyed.

In Liberia the violence of the Taylor-led civil war grew out of the growing violence of the Doe regime and the delegitimization of the state. The Taylor regime, while efficient at extracting commodities for personal gain and running a multifaceted criminal enterprise, brought no positive state presence to the whole country. This contributed to the next cycle of violence that drove Taylor from office.

In the Petén the violence of the civil war, paid for in part by the illegal extraction of timber, gave way to violence of a variety of organized criminal activities, from continued illegal logging to illegal exotic species trafficking to cocaine trafficking. Each has taken a tremendous toll on the environment.

Given the Mexican government's militarized war against the Mexican drug trafficking organizations (with strong U.S. support) and the international pressure on Guatemala to gain greater control of its territory to aid in that effort, the next cycle of violence in the Petén will likely revolve around territorial control of the region.

In Colombia, there is evidence of a relationship between violence and land seizures and the development of African palm, a phenomenon which has its roots in an decades-old conflict involving both right-wing "paramilitary" forces (formerly under the moniker of the the United Self-Defense Forces of Colombia, AUC) and left-leaning groups, including the Revolutionary Armed Forces of Colombia (FARC). Although the FARC and other leftist insurgents (such as the ELN) have been largely neutralized and the AUC has officially demobilized, violence has continued, in part because of the manpower trained in fighting, the lack of other opportunities, and the easy access to weapons.

Interlinked forms of violence

Different types of violence are strongly linked, and one cannot usefully disaggregate them in these three cases.

In Liberia the violence of different militias was strongly linked to the presence of security guards in the timber concessions (and vice versa, with the security guards using violence to help the militias). Neither group operated independently of the elite Anti-Terrorist Unit and other special forces favored by the Taylor regime. Nor could that violence be decoupled from the violence in neighboring Guinea and Sierra Leone, where each party had violent proxies.

In Guatemala the drug-trafficking violence cannot be disassociated from the armed groups that offer protection to different types of criminal organizations. Nor can the cocaine pipeline in the Petén be really separated from the broader regional pipeline that involves Central American gangs and their Mexican counterparts.

Colombia offers perhaps the clearest example of the interlinked forms of violence. There, nonstate actors involved in the drug trade and counterinsurgency have operated in the past as agents for hire or as independent entrepreneurs. None of these forms of violence is separate from the others, however. The revenue generated from one activity can fund another, with the human capital easily moved from one task to another.

Violence with cross-border and transnational links

In some countries such as in Colombia and Liberia, predatory groups have supported commercial interests across borders. In Liberia cross-border violence was most closely linked to acquiring commodities, particularly diamonds, to fund Taylor's struggle for power. In Colombia the violence has fewer cross-border links, though in the past it has occasionally spilled into neighboring Ecuador and Panama.

Guatemala could be categorized as organized crime and trafficking. The timber-rich Petén region is part of the pipeline carrying cocaine and other illicit products from South America to the United States through Mexico. Most of the violence is generated by external actors in Mexico and by the internal dynamics of the Mexican drug trafficking organizations.

But the lines are not entirely clear cut. Liberia had elements of linking global ideologies to local grievances, in the cases of Hezbollah and al Qaeda. In Colombia the violence in the African palm land disputes has come from groups that also have strong ties to drug trafficking organizations, which generate violence because of that transnational trade. In the Petén international organized crime and trafficking groups encompass local predatory groups such as illegal loggers and human traffickers.

It is precisely this blurring of the lines, both in the types of groups operating and in how they link, that greatly complicates the ability of states, even with the political will and resource base, to tackle the threats. Yet the commonalities also offer some identifiable elements. If states deal with them effectively, they can help reduce the use of commodities to fund conflicts. They can also help establish a positive state presence that narrows the operating space for organized criminal groups.

Impact on forests during and after conflict

Quantitative data are sparse on the impact of conflict on forest cover, and the qualitative data present a mixed story that can change during the conflict. For example, conflict can actually act to protect some areas of forest by reducing pressure: if the security situation in the forest deteriorates so that the loggers abandon their concessions and local communities flee, pressures from logging, agriculture, and hunting are temporarily alleviated. But this pressure may simply be displaced to other areas, especially those around displacement camps. For example, refugees' concentrated demands for construction materials and fuelwood around camps can devastate local forests. And hunting can increase, due to the availability of firearms, and the loss of livestock due to looting and displacement.

Even so, there are a few clear dynamics of increased pressure on forests during conflict. For combatants, forests can either provide shelter or block access to strategic territory. Forests might be napalmed, defoliated, logged, converted to military use, or simply become the site of heavy militarized presence, especially along borders or areas of key strategic value.

Conflict displaces people, who, especially when crowded into camps, can cause spikes in demand for fuel, construction materials, and bushmeat, the more so when livestock prices rise and protein rations in camps are low or unreliable. Another important but often overlooked consequence of conflict is the loss of management staff, the theft or destruction of resources necessary for oversight, and the redirection of funding for managing and conserving forests.

Postconflict pressures on forests

The pressures on forests after conflict tend to be less ambiguous, heightened by the myriad demands and donor interventions that often go uncoordinated. The needs are urgent for employment, for quick revenue for reconstruction, and for poverty reduction to demonstrate a “peace dividend.” But timber demand is high for reconstruction and for servicing the large influx of foreign aid workers. These needs are often met by exploiting forests, in view of their low skill and technology demands. But while access to forests quickly increases with improved roads and bridges, de-mining, and growing population pressure, reforms to management and law enforcement are often time consuming and politically freighted endeavors that lag behind.

Postconflict governments in forested countries tend to overestimate the revenue potential of industrial logging concessions as a means to jump-start the economic recovery, often to the detriment of smallholder access and health of forests important for local livelihoods. A rush to allocate large concessions can result in a resource grab by the political elite and other speculators. A failure to meet revenue projections can also undermine reconstruction efforts and poverty reduction strategies.

More perniciously, emphasis on the industrial concession model can disadvantage local communities by reducing their access to forests, and failures to deliver on poverty reduction can erode trust in the government. Most troubling, if concessions are allocated ahead of adequate oversight capacities, a return to “business as usual” worsens fragility and could precipitate a return to conflict financing.

Spoiler problems and security concerns

The postconflict period is a marked transition that produces a sense of urgency and high expectations among citizens as well as donors. These expectations often lead to an overly expansive agenda, which frequently falls short because capacity and political will may yet be in short supply. While expectations may encourage a faster pace for change not found in other fragile contexts, citizens are impatient and easily disappointed. Opposition can use this frustration to bolster a spoiler movement that threatens the peace.

Peacekeepers can aid in neutralizing the threat from spoilers. So, the United Nations Department of Peacekeeping Operations should think about how to take a more deliberate role in forestry. Donors can also raise capacity in peacekeeping.

Triage and avoiding pitfalls of short-term trade-offs

The tenuous transition period makes the temptation to make short-term trade-offs in the interests of security that might undercut long-term reforms and sustainable forest management, and ultimately conflict prevention – moving quickly, for instance, in reintroducing production forestry in the absence of a framework for good management. But a full agenda with a sense of urgency necessitates a triage, looking for immediate, visible impacts that can build confidence and ownership without undermining longer term reform. Success builds awareness and a constituency for further reform, to which donors should be prepared to make a long-term commitment (on the order of 10+ years rather three to five).

In such a triage, it is critical to target first the most vulnerable conflict-affected populations and consult with them to identify their most urgent needs. Women in particular – a high number of them widowed heads of household due to wartime combat deaths – are often disadvantaged by the majority of “quick impact” employment projects that focus on ex-combatants in male-dominated sectors such as logging, especially when these activities undermine female-dominated sectors such as agriculture.

Formalizing informal sectors, such as logging and charcoal production, can help meet local needs and provide employment and boost economies. But careful analysis is critical in deciding on effective approaches and their impacts. Who would benefit from formalization? How can formalization balance the need for oversight and forest protection with the need to provide a level playing field, given community capacities? What safeguards are needed to ensure that local operations are not co-opted by the political elite or used to launder illegal wood harvested elsewhere? These important questions must be unraveled in the local context, with strong support from donors to protect local community interests and local forests. Donors have a responsibility to inject realism into the debate about how to ensure that safeguards are implemented for industrial and community operators.

Land conflicts and forest concession reviews

Displacements and legacies of the use of land and forest for patronage create a multitude of disputes over land its and resources. Land-tenure reform requires regular consultation with stakeholders that cannot be rushed or it risks creating misunderstandings, instability, or being co-opted by the elite. Strong institutions must be developed for adjudicating land and forest ownership and for mediating disputes.

Even forest companies dispute claims to the rights to log particular areas because of concessions for patronage, making it impossible to determine who has the legal right to log after conflict. For this reason a forest concession review of the companies that did not comply with the requirements when concessions were issued is essential to reform and revitalize the sector.

In cases involving conflict timber, such reviews should go beyond an analysis of legal rights and examine the behavior of logging operators and forestry officials. Egregious violators should be removed from the sector, rather than risk a return to “business as usual.” Moreover, the lessons from such reviews about past behavior can help inform the type and sequencing of necessary reform measures.

Achieving such reform will be difficult, not least because the years of conflict have left society broken, requiring the rebuilding of government, the private sector, and civil society. This lack of capacity can be exploited by spoilers who benefit from “business as usual” and therefore obstruct comprehensive reform. Aligning reform measures in ways that can reward “good” actors is crucial for blocking spoilers and building the necessary political will for change.

Corruption control

Corruption control and oversight mechanisms constitute an essential cross-cutting element for countries emerging from conflict. As a start, forestry (and indeed all resource sectors in countries where these have been critical in conflict) should be explicitly incorporated into anticorruption frameworks, and consideration should go to including accountability mechanisms in peace negotiations where the power sharing of resource ministries is discussed.

Momentum and constituencies for change can initially be built more effectively outside the state through capacity building and empowerment of communities and civil society, including mechanisms for public participation and transparency. But expecting the least empowered to oversee the most powerful requires safeguards and whistleblower protection, including support from the diplomatic corps and United Nations missions.

Capitalizing on opportunities for cross-sectoral coordination

Donor forestry experts should take advantage of the available coordinating forums for the various donor agencies, nongovernmental organizations, and government institutions to raise awareness of the variety of impacts from other sectors on forest resources. In addition, a natural resource working group, bringing together a range of sectors and stakeholders, might be a useful mechanism for communicating goals, priorities, approaches, and expertise to avoid counterproductive measures. Some relevant topics for coordination include:

- Mitigation of impact of displacement camps and returnees.
- Resettlement of ex-combatants and displaced communities.
- Hotspot monitoring of ex-combatant involvement in illegal forestry sectors.
- Employment programs and possibly formalizing informal forest-product sectors.
- Wood sourcing and procurement for reconstruction and donor projects.

Lack of capacity – or political will?

With the flight of expertise and financial capital during the war, and institutions eroded by lack of funds and corruption, a significant challenge for postconflict governments is the lack of capacity. Experience shows that, besides traditional capacity-building measures, essential services for bringing forests under sound management can be outsourced in the short term if capacity is still lacking. Such outsourcing should be accompanied by training and mentorship, a plan for transferring these services back to government, and the building of adequate oversight mechanisms.

But given the distinction between states that are incapable and those that are unwilling to perform certain functions, it is also critical that donors should not mistake a lack of political will for a lack of capacity. Transitions are often incomplete in postconflict countries, with many of the old players still in positions of power, officially or informally. Donors should not shy away from analysis of what interests are at play in different institutional functions. Without this analysis, reforms “on paper” are unlikely to be implemented if conflicts of interest obstruct them.

KEY LESSONS

The following points encapsulate the primary lessons from the case studies.

- A positive state presence is vital for preventing conflict and for severing or limiting the links among organized criminal organizations and illicit commodity traffickers. This means more than the simple presence of the state in the form of military forces and law enforcement agents, as Liberia clearly shows. But it does require the physical presence of positive state elements (schools, jobs, health care, markets for products), as Colombia and Guatemala’s Petén show. When that state presence exists, even in somewhat limited form, organized criminal groups may operate but lack the space and infrastructure to challenge the state as an entity or to become the *de facto* state in subnational areas.
- Commodity trafficking can be both the cause of conflict and a primary way of maintaining it. Before and after conflict, gaining a positive state presence in these areas is key in breaking the cycle of violence. Applying anti-money-laundering laws, anticorruption approaches, and best business practices can help strengthen the state’s ability to meet the needs of its population. In particular, the expectations of local communities in the commodity-producing areas have to be met, so that they feel they have a stake in maintaining the government rather than fighting it.
- Sanctions have a role. Liberia shows that targeted sanctions on such commodities as timber and diamonds can have a direct impact on the financial structure of a criminal state.
- Commodity conflicts take place in identifiable and predictable geographic locations, and conflicts revolve around those physical spaces. But because the commodity is valuable only if it can be accessed and sold by a party in the conflict, control of those locations is a central axis of conflict.

- These locations do not map neatly onto a state's territory. They are often subnational or transnational, operating across borders. They are also expanding, so that the conflict-generated violence and disorder spread to more than one state. This is clear in Liberia and the Petén.
- To extract value from the commodity, the controlling armed group is often forced to rely on an interlocking set of social networks. These groups, or at least their key parts, have to operate in the physical space where the commodity is present, often regionally.
- Given the multistate nature of many of the commodity conflicts, solutions require regional and multistate cooperation. As the West Africa and Mexico–Central America pipelines demonstrate, attacking each conflict in isolation simply reroutes the violence and commodity trading.
- The social networks seldom deal in one single commodity but trade a range of goods and services, making them difficult to disrupt.
- Still, disrupting these networks—particularly their international facilitators, but also regional and local operators—is one of the best methods to undermine armed groups' operations. Removing key facilitators in the circular pipeline has a direct impact on the flow of money, weapons, and other services.
- Commodity conflicts tend to show cycles of violence that have proven very difficult to break. This is particularly true in areas of high regional violence, where one stress factor is that weapons are cheap and easy to acquire. Without determined action in the immediate aftermath of one phase of the conflict, a second stress factor grows in importance: the availability of battle-hardened veterans of the previous conflict who can carry on the conflict in ever more sophisticated ways.
- After conflict the international actors involved must place a very high priority on diminishing these two stress factors, and they can do this only within a regional framework. Without that framework, combatants can migrate to regional safe havens and retain their access to weapons—and their ability to create conflict. This regional approach requires multiple nations to commit to ending the exclusion and isolation of the potential conflict area, thereby making conflict “not feasible” in Collier's model.

Such an approach also requires a much stronger positive state presence, resource-exploitation mechanisms that bring in benefits, and the capacity to meet social needs.

Particularly important, if civil society is to play an oversight role and so generate a constituency for change, it must be supported, both domestically and by international institutions. This support must include protection when spoilers attack members of civil society.

Reporting systems must also change to increase transparency in delivering accurate and timely information. This transparency is needed—but not necessarily sufficient—to hold governments accountable. Accountability makes it harder for corrupt officials to act with impunity, especially when a transitional government is made up of former warring factions that hold ministerial positions as part of the peace agreement.

Fortunately, postconflict countries have a sense of urgency, and reform efforts can leverage this urgency (and frequently the associated boom in financial aid) and build expectations for change. But there is a

tension between achieving rapid highly visible progress and building durable institutions. Natural resources are prone to this tension, as governments feel that they can tap them to provide instant revenue—and perhaps, more important, employment (of ex-combatants if possible)—even though these were the same resources that originally fueled the conflict. Governments are tempted to overestimate what the forestry sector can provide, hoping to kick-start funding to the treasury and reduce poverty. But if they fail to meet their projections, they can undermine confidence in the reforms and trust in government, alienating the population and driving away cautious, risk-averse donors and investors.

Just as governments must help build trust in society, the national forestry sector must build confidence in the international marketplace that the old ways of conflict timber are gone—and that it has adopted a new legal framework. Responsible consumers want to know that their purchases are not fueling a resumption of conflict. Here, new legislative environments in consuming countries are helping to move the sector to legality by reinforcing local laws, such as the U.S. Lacey Act and the European Union's Voluntary Partnership Agreements. Postconflict countries also need to play their part. Given that few loggers operated during the conflict (for safety reasons), most will be unfamiliar with the evolving marketplace and new consumer demands. Much education is necessary.

But finding a responsible private sector is rarely straightforward after a conflict. Aside from the overlapping concession claims, many of those investing are not loggers but merely speculators, anticipating that with peace and stability the value of a logging concession will rise dramatically. Governments need the capacity to determine which operators can comply with the production requirements in their concession agreements and which cannot, because they will provide neither the money needed for reconstruction nor the jobs. And if a government does not have the capacity to enforce contracts, or finds this politically difficult in the tense postconflict environment, it should consider outsourcing these regulatory functions, at least temporarily.

Governments need to demonstrate their commitment to reform (and that they are indeed reforming) because successful recovery depends on this commitment to good governance. Among resource-dependent countries, the economies of democracies grow faster than those of autocracies—if they follow the principles of good governance, which include:

- Transparency that helps lead to accountability and enforcement.
- Effective legal and management regimes, including economic efficiency, appropriate incentives, and conflict management.
- High-quality administration, including anticorruption, and monitoring and evaluation.
- Participatory management, including equitable benefit sharing.
- The rule of law.

Where countries lack the checks and balances of good governance, democracies actually lag autocracies in economic growth—and slow economic growth is one the largest stresses on a country's ability to deal with the risk of conflict. So, to escape any curse posed by a wealth of natural capital, postconflict reform must be focused on developing good governance. A durable peace depends on it.

1

FORESTS, STATE FRAGILITY, AND CONFLICT

*Emily Harwell**

Voluminous research over the last decade has demonstrated the links among poverty, armed conflict, and weak state governance. This research has allowed academics and development practitioners, including the World Bank, to recognize that states exemplifying these links suffer from a complex array of weaknesses—in economic management, political legitimacy, regulatory quality, social inclusion, and provision of physical security and basic services.¹

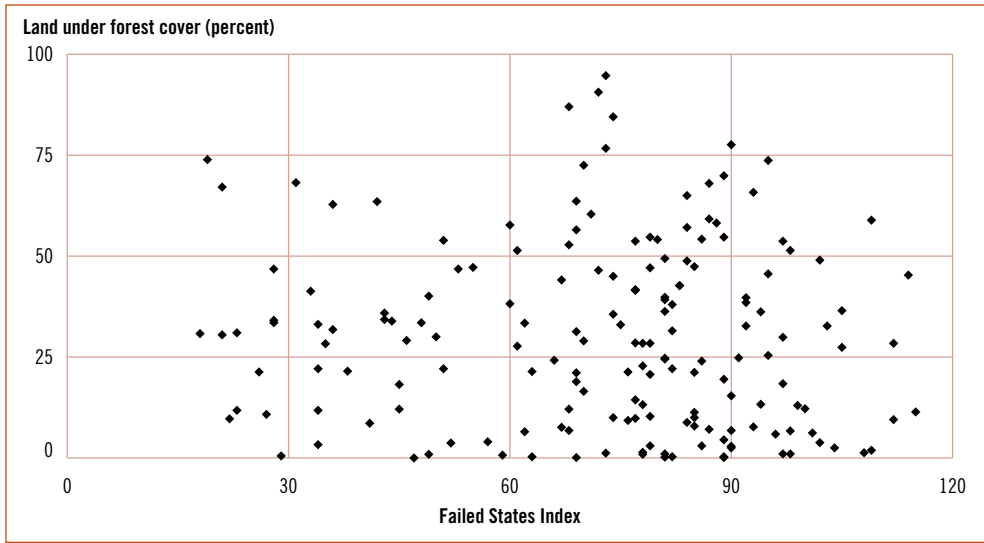
Analysts have traced strong correlations among state fragility, conflict, and the means for the state to manage its natural resources. Risk factors for conflict and fragility² include excessive economic dependence on resource exports to the detriment of other sectors, untransparent use of resource rents, and rulers' use of these rents and allocation rights for political patronage and personal enrichment.³ But the analyses have focused primarily on oil, gas, and minerals, leaving forests underexamined.

Where forests are included in the analyses, findings related to the association between forests and conflict have focused primarily on correlations,⁴ leaving the causal pathways among forests, diverse forms of state fragility, and violence poorly understood. Even the correlations for forest-related factors are difficult to unravel. For example, dependence on forest income, as a share of gross domestic product (GDP), is a poor predictor of violent conflict. Likewise, the proportion of national land area under forest cover is a poor predictor both of state fragility and of outbreaks of armed civil or international conflict—indeed, it has no correlation with the likelihood of the country becoming a failed state (figure 1.1).

Even so, extensive areas of the world's forests are in failed states or countries assessed to be at moderate risk of failing, suggesting an association between overall forest coverage and fragility (figure 1.2).⁵ So understanding the relationships and impacts on forests and state fragility is crucial for local livelihoods and cultural values, national and global economies, and international trade, as well as “global goods” such as forest carbon and biodiversity. That understanding has implications for donor interventions in the forestry sector and in conflict and postconflict programming.

* Contact information: Natural Capital Advisors LLC, 2102-1238 Melville Street, Vancouver BC Canada V6E 4N2; phone: +1 778 737 2958; www.naturalcapitaladvisors.com; e-mail: emily.harwell@gmail.com

FIGURE 1.1: FORESTS AND STATE FRAGILITY

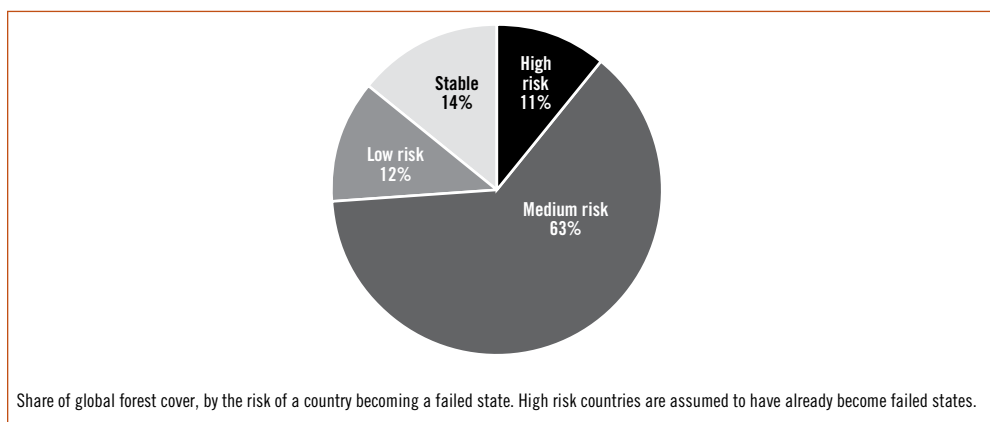


Source: Author, based on World Bank 2010 and U.S. Fund for Peace 2009.

This chapter reviews current knowledge of the links among forests, conflict, poverty, and state fragility, examining:

- *The nature of fragility in predatory states, incapable or absent states, and conflict-affected states, and their differing relationships to forests and conflict.*
- *The mechanisms enabling forests to facilitate or prolong conflict, including financial flows from forest extraction to state and nonstate belligerents, the use of forests as patronage, traffic in weapons by loggers, and employment of belligerents by logging companies for security.*
- *The impact of conflict and fragility on forests and forest livelihoods, particularly cross-sectoral postconflict issues associated with the management of forest resources.*
- *The characteristics of state fragility that should be the focus of reform in postconflict interventions to protect forests and forest-based livelihoods and to mitigate further conflict.*

FIGURE 1.2: DISTRIBUTION OF TOTAL GLOBAL FOREST COVER AND RISK OF BECOMING FAILED STATE



Source: Author, based on World Bank 2010 and U.S. Fund for Peace 2009.

A few caveats

The paper emphasizes cases that have data, such as Liberia, the Democratic Republic of Congo, and Cambodia,⁶ and may therefore overemphasize cases about which much is already known (possibly implying that forest-related dynamics are unimportant where data are missing). A major objective is to examine cross-sectoral dynamics within well-known cases where donors are heavily involved, though whenever possible I include data on lesser known cases. Future research needs to pay greater attention to the dynamics of lesser known cases.

Forests have different uses—ecological, economic, cultural, physical—for different communities. The resulting competition can lead to grievance, and the chapter highlights several of these conflicts in forest uses, especially after conflict. It also includes analysis of the unique characteristics of forested territories—often remote from capital cities and populated by ethnic minorities whose rights are weakly recognized, if at all, and the degree to which these rights and values are infringed by an overemphasis on the industrial timber sector, especially after conflict. But the chapter focuses most heavily on the productive role of forests in providing economic goods, because these are the aspects of forests most commonly targeted by both conflict and postconflict governments as well as nonstate combatants. This should not imply that these are the most important aspects of forests—only that they are the most relevant to the investigation here. For example, the role of conversion of forests to agriculture or other uses receives little attention, and would be a valuable focus of future work.

DIFFERENT TYPES OF STATE FRAGILITY

The development community's most commonly accepted definition of *state fragility* is that used by the U.K. Department for International Development and the OECD Development Assistance Committee: states failing to meet core functions, whether due to lack of willingness or capacity, to provide basic services and physical security to its citizens.⁷ The definition implies that state fragility is exacerbated by the lack the rule of law (not just monopoly over the use of force), strong institutions, control of independence and private interests, and concern for the population's well-being. Such weaknesses lead to dysfunctional government and a vulnerable population, undermining forest conservation and management. The definition is conceptually imprecise, however, for various reasons.

Predatory states and incapable or absent states

Continuum of fragility. State fragility is not an "either-or" condition—it exists on a continuum, because the question is not *whether* states are fragile but to what degree and in what areas. But different approaches to measuring fragility are contentious and often produce very different assessments. For example, what should be used as indicators—policies and legislation in place (easy to measure but may exist only on paper) or outcomes? If outcomes, which ones are the best for various aspects of fragility? What methodology should be used to measure the outcomes?⁸ Resolving these queries is a precondition for effective reform because, as the old adage says, "You manage what you measure."

State and societal fragility. Fragility shows different forms, whether derived from state or societal weaknesses. A comprehensive discussion of all its types is beyond the scope of this paper, which focuses on the links among forests and three main types of fragility: predatory states, incapable or absent states, and conflict-affected states. Not mutually exclusive, these conceptual categories often overlap or lack uniformity over time, geographic territory, and government institutions. A politically sensitive analysis can provide valuable insight into where and how reform interventions can find the most traction, especially with local partners.

So a focus on aspects of state fragility does not deny the importance of societal aspects that may contribute to conflict—or conversely, that may act as powerful mechanisms for conflict prevention or mitigation. Indeed, informal institutions are often much stronger than formal ones in conflict-affected countries. But because state institutions play a powerful—if often negative—role in the resource-use dynamics of central interest here, the chapter takes the state (and its shadow partners)⁹ as its starting point. This focus also recognizes the central mandate of donors, including the World Bank, to work in partnership with national governments to reduce poverty through the reform and support of governance institutions.

Intrastate and interstate variations. The definition and measurement of fragility is imprecise. Many countries have pockets of fragility, such as Mindanao in the Philippines, Papua in Indonesia, Amazōnas in Brazil, Chiapas in Mexico, and Naxalite strongholds in India. These areas have poor access to government services but are often the most richly forested due to their remoteness from urban centers. And they are frequently populated by minority populations whose forest rights may be only tenuously recognized, if at all.

Forest data tend to be collected nationally, so many analyses—including this one—have to work at that level, failing to capture the detail of subnational conflicts. The history and causality of tensions are usually specific to these areas and cannot be reduced to a struggle over forests alone, though the damage caused by logging is often a source of grievance, making the control of land and forests, and the derived revenue, bargaining chips for peace agreements. This is a subject requiring in-depth field study.

Fragility among neighbors can spread over porous borders, as in Guatemala, Mexico, and the United States; Ecuador, Colombia, and Venezuela; the Horn of Africa; the Mano River region of West Africa; the Great Lakes region of Central Africa; southwestern China, Myanmar, and Thailand; and Afghanistan and Pakistan. Borders are often more porous where regional forces are at work, such as ethnic relations, or flows of refugees, militia, labor, finance, and commodities.¹⁰ In addition, transnational networks in the shadow economy, including specialized traders, financiers, weapons dealers, and other fixers, are indispensable to a regime's criminal activities.¹¹ These cross-border dynamics suggest a need for a regional rather than state-based approach, as discussed in later sections.

Strong fragile states and weak fragile states. What characteristics lead to conflicts where forests play a central role? To find out, it helps to group them under strong and weak fragile states.

Strong fragile states (unwilling states) use resource rents and concession allocations for patronage. This has a great impact as it undermines sustainable use of forest assets for development; reduces access to forests for local livelihoods; short-circuits state accountability to citizens; arrests development of sound governance institutions; and undermines state legitimacy (discussed below). These states are predatory: their elites choose to focus their capacities on consolidating personal and state power through patronage relationships with the private sector and with a wide array of specialized criminal networks (instead of working toward the public good).¹² Such patronage undermines the rule of law, strengthens criminal networks, and encourages the shadow economy.

Weak fragile states (incapable states) are unable to control some areas (and not all these areas are violent), either due to extreme lack of capacity or complete absence of government presence. Factors limiting state control include abundant and lucrative resources, especially those with heavy global demand; distance from the capital, but proximity to a porous border; accessibility for extracting resources (that is, close to ports, roads, or navigable rivers); a history of ethnic or religious polarization (or both); and high vulnerability to external influences.¹³

These areas *may* see a proliferation of private militia and criminal groups attempting to control lucrative trade routes or commodity extraction (of illicit drugs, but also timber and tree crops such as rubber, palm oil, and cocoa).¹⁴ Once established, these networks often increase their power by diversifying into other illegal traffic such as weapons, people (laborers, refugees, sex workers), stolen vehicles, and untaxed consumer goods like tobacco and alcohol. Or they may move from these channels into natural resource crime.¹⁵

Development assistance. Another important area of investigation is the impact of interventions undertaken with development assistance, particularly in the active phase after conflict, and how these might

unintentionally contribute to forms of protracted conflict. For example, in some postconflict countries, transitional governments and donors have overestimated the potential contribution of industrial forestry to poverty reduction. They have therefore overemphasized industrial-forestry allocation of concessions and support programs at the expense of smaller scale forest livelihoods, adversely affected by these large concessions. This overestimation is exacerbated when the allocation process is co-opted by speculators who do not log, but hold their contracts for several years until they can sell the rights to a logging company and make a handsome profit.

Conflict-affected states

Conflict can be viewed as a point in a continuum of fragility that both precedes and follows conflict. But conflict is worth special attention because it has significant effects on fragility and can be transformative, whether it occurs in predatory or absent states. Conflict destroys assets, weakens institutions, disrupts social networks, forges ties between criminal networks and combatants, drains individuals' and the state's financial reserves, and creates widespread and long-lasting emotional and physical trauma. Conflict aggravates old weaknesses and creates new ones, further driving negative feedback loops of poverty, violence, and resource degradation. Although all conflicts are unique, some generalizable conditions produce high pressure on forests after conflict, with cross-sectoral implications to which donors and governments should be attuned. (These conditions are discussed toward the end of the paper.)

What kind of conflict is most relevant to forests? Forests are locally important for livelihoods, cultural meaning, and ecosystem services (such as water and soil fertility). They are nationally important as an economic asset, primarily for timber production and for land. Forests are also important to international markets for timber and other forest products as well as for global goods, which are increasingly monetized, such as biodiversity (useful for ecosystem functions and genetic material) and carbon. Because of these multiple and often competing constituencies, forests are frequently the center of struggles for control of access, use, and benefits. These contests can be widespread but tend to be nonviolent, or if violence breaks out, it tends to be localized.¹⁶

Under certain circumstances, however, forests can fuel conflicts that have other root causes. That is, conflicts tend not to be fought over forests, but they are often exacerbated by certain aspects of forest use (including, but not limited to, financial flows from forest corruption and unregulated timber revenue as sources of conflict financing). The focus here is this subset of violent conflicts that are fueled by forests or that have significant impact on forests or forest livelihoods. With this narrow focus the chapter examines only conflict that is violent, using the terms “*conflict*” and “*violence*” interchangeably.

Of necessity, the focus on “widespread armed conflict” is primarily interstate and civil war (both coups/insurgencies and separatist conflicts) because that is where most quantitative and qualitative data lie. Also included, when possible, are examples of protracted violence in contexts considered to be “postconflict” due to a formal peace agreement. Protracted violence can include that associated with organized crime or electoral violence, unrest associated with increased prices of food or other essential commodities, and ethnic violence.

The term “postconflict” is in some ways misleading because it implies an end to violence, which, as noted above, is not the case in many countries following a peace agreement. More than a third of all peace agreements break down within a decade, often because the belligerents gain revenue to fuel a resumption of conflict from the illicit exploitation of natural resources.¹⁷ Even so, the term “postconflict” is a key focus because it marks the onset of a variety of dynamics unique to these contexts—dynamics that involve an array of donor programs with important cross-sectoral implications.

THE LINKS BETWEEN FORESTS AND CONFLICT

Following the emergence in the 1990s of the “resource curse” literature that explored the paradox of poor development outcomes in resource-rich countries,¹⁸ Paul Collier and Anke Hoeffler¹⁹ found a strong correlation between abundance of natural resources and risk of violent conflict. Building on these findings, Collier and colleagues outlined a nexus of abundant but mismanaged natural resources, repeated cycles of conflict, weak governance, and entrenched poverty—downward spirals they refer to as “development in reverse.”²⁰

Using later analysis and improved datasets, however, many authors found only weak associations when using Collier and Hoeffler’s broad definitions of resources, abundance, and conflict.²¹ But when they defined these terms more precisely, they found strong correlations between risk of onset of civil war and contribution to GDP of high-value resources such as oil, gas, and minerals.²²

The explanatory mechanisms of the relationship between resources and conflict also remain underexamined and somewhat delimited by the disciplinary focus of the investigator. Collier and Hoeffler interpreted their finding of a statistical correlation as a causal relationship, expressed as the now well-known and much-debated “greed over grievance” hypothesis. Among other things, this “greedy rebel” argument held that insurgencies are primarily economically motivated, suggesting that conflict prevention and mitigation should focus on the economic criminality of these nonstate actors, rather than addressing either the political grievance of the insurgents or applying oversight mechanisms to a corrupt state.

In response to these early formulations, several authors countered that, while economic gain may indeed facilitate insurgencies and may even be the primary motivator of many elite commanders (especially later in the conflict), grievances still have an important role in motivating people to join or support a movement. They also remain important elements of the individual character of conflicts to which donors must attend, rather than relying on blueprint approaches for addressing all conflicts.²³ The importance of grievance resulting from oil extraction in predicting conflict has been borne out in at least one econometric study.²⁴ In fact, Collier also later expanded his thinking to argue that in postconflict settings, policies for social inclusion were a greater priority than macroeconomic management.²⁵

The causality in these relationships among economic reliance on natural resources, weak governance, conflict, and poor development outcomes remains unclear. There is some econometric evidence that economies that depend heavily on agriculture are indeed at higher risk of conflict. This, however, is the case regardless of the presence of other resources such as oil or diamonds, suggesting that the lack of economic diversification

reflects some weakness other than overreliance on lucrative sectors.²⁶ In fact, some authors have argued that war and institutions weakened by lack of capacity reduce other economic options and thereby increase reliance on primary resources, not the other way around.²⁷

In sum, the research of Collier and colleagues—like Auty²⁸ or Sachs and Warner²⁹ and other analysts of the “resource curse” school—sparked a paradigm shift in thinking about the links among resources, armed conflict, and development. More recent research has since demonstrated the need for more fine-tuned analysis of the particular elements of this nexus and the circumstances under which it is relevant, and a more nuanced interpretation of findings, particularly in relation to causality and mechanisms.

How do forests compare with other natural resources?

So, although recent research has demonstrated that links clearly exist among resources, conflict, and poverty, the links’ *character* cannot be easily generalized for different resources, conflicts, or management regimes. Unlike earlier arguments for the primacy of either scarcity or abundance in keeping countries locked in cycles of conflict and underdevelopment, more recent work has shown the role of resources in conflict and fragility to be sensitive to aspects such as physical attributes, markets, and accessibility of resources.

In their relevance to conflict and state fragility, what are the critical differences between forests and other better studied resources such as oil and diamonds?

Forests and timber have several characteristics that may make them likely to prolong conflicts (table 1.1). Perhaps most important, forests are critical to local livelihoods, especially for women and the rural poor (the most vulnerable both before and after conflict). These competing uses between local livelihoods and industrial logging can lead to grievance and various forms of conflict.³⁰

TABLE 1.1. CHARACTERISTICS OF THREE RESOURCES AND THEIR RELEVANCE TO CONFLICT

	OIL	ALLUVIAL DIAMONDS	TIMBER
Competing Uses	No	No	Yes
Shelter	No	No	Yes
Footprint	Point	Point	Diffuse
Labor	Skilled	Unskilled	Skilled/ Unskilled
Technology	High	Low	Low/Medium
Detectable	Medium/High	Low	High
Value/weight	High	High	Low/Medium
Price Volatility	Very high	Low/Medium	Medium
End Users	Undiscriminating	Discriminating	Discriminating
Renewable	No	No	No / Yes (if sustainably managed)

Source: Author.

Forests provide shelter and a protected pathway for refugees and rebels, which may make the logging and increased presence in forested areas desirable for governments facing insurgencies or encroachment from

foreign forces. Logging operations in these areas, particularly along strategic borders, are often highly militarized. Forests also prolong conflict because they are “lootable,” that is, extracting them involves little cost and low skill, and they are accessible. Lootable resources have been demonstrated to act as sources of revenue to insurgents, criminal gangs, or state powers whose revenue streams have been interrupted by sanctions.³¹

The footprint (or geographic area) of logging operations is much more diffuse than that for point sources like oil and mining, giving forestry potentially greater impacts on livelihoods and making it harder to control, so contributing to insurgent or criminal funding. While diffuse resources tend to be associated with rebel movements, point resources are more associated with separatist movements, because their extraction is more easily controlled by a central authority.³² The diffuse nature of logging operations also necessitates strong security, but as security forces employed by forest companies have attacked and looted surrounding communities, it can contribute to violence.³³

Timber is easily detectable, making it relatively easy to monitor and thus susceptible to informal—state or nonstate—“taxation” at transport bottlenecks, which provides revenue to fund conflict. But paradoxically, timber traffic can be more difficult to police than commodities such as drugs or wildlife, because illegal and legal timber can be easily mixed, requiring detailed systems for verifying the legality of origin and permits, and expertise to identify restricted species.³⁴

But some characteristics make timber less likely to cause conflict. It has a low value-to-weight ratio, which creates fewer discipline problems than with more easily smuggled resources such as diamonds. It has lower overall value than, for example, oil and precious minerals and therefore fewer “spoilers” willing to prolong violence for economic reasons solely related to timber.³⁵ Although timber is vulnerable to commodity boom and bust cycles, it is also more easily discovered, and its prices are less volatile than oil’s (but more than diamonds’), and so has fewer destabilizing impacts.

Further, although timber laundering is a persistent challenge, end users of timber products are becoming more discriminating about sourcing and legality, making certification increasingly attractive as a means to distinguish wood sourced from “good” and “bad” actors. A reputational risk for wood has raised interest in concession certification, such as the Forest Stewardship Council, as well as countrywide programs, such as legality assurance through the European Union’s Voluntary Partnership Agreements for timber.

Finally, trees are renewable but take time to grow, such that sustainable management requires long-term planning and investment. So although forests are renewable, without incentives or long-term enforcement, they are vulnerable to loggers and short-sighted governments that may be tempted to asset-strip them.

What is known about forests and conflict?

While most statistical studies have focused on oil and diamonds, some have looked at timber, and they reveal mixed evidence on the association between forests and conflict. This lack of clarity stems partly from

different datasets and coding methods (as in what constitutes a resource or a conflict), but also from the complexity of the factors in each conflict. Correlation is not the same as causation, and correlations may be misleading as they can be indicative of a relationship with an as yet unrecognized independent variable.

Still, some patterns emerge. First, increased size of the (formal) forest industry and likelihood of conflict reveal a weak association, although this is significant only if Myanmar is included in the datasets. Likewise, prolonged conflict and increased lootability of forests (measured by distance to a coastline) show a correlation, but with small datasets this result is dependent on the inclusion of Bangladesh, Myanmar, Papua New Guinea, and Senegal.³⁶

Second, although no clear evidence emerges of a strong role for forests in starting civil conflict, *prolonged* conflict is associated with increased forest cover *when there are other lootable resources available* (such as minerals and gems), but not with forest cover alone. Both a literature review and statistical analysis find that oil and diamonds can either prolong or shorten civil wars, while “the only resource variable robustly linked to conflict duration is a measure of ‘contraband’, which includes gemstones, timber, and narcotics.”³⁷

This second result suggests that while forests alone are not sufficient to prolong conflict, revenue may provide supplementary income, or forests may act as a refuge to protect combatants against military defeat. Alternatively, the structural aspects of fragility such as weak institutions may increase the risk of conflict in countries with a variety of available lootable resources. In addition, the high value of other extractive resources (and for diamonds, the ability to conceal them) often contributes to spoiler problems where combatants fracture and may prolong violence purely to maintain control over the resource. As noted above, spoiler dynamics are less problematic for timber alone, which is both bulky and less valuable. But again, data are sparse and seem to be driven by a few cases in northeast India, Myanmar, and Bangladesh.³⁸

Finally, statistical³⁹ and qualitative⁴⁰ evidence indicates that the form of the extraction regime and state institutions are more important predictors of fragility and conflict than the presence of resources, the size of industry, or dependence on resource exports (as a share of GDP). But these analyses deal primarily with authoritarian, oil-exporting rentier states (“petro-states”). The particular role of the forestry sector and its relationship to fragility and conflict remain insufficiently studied. Ross is the exception: his study of Indonesian, Malaysian, and Philippine timber sectors reports that rising timber prices and lack of adequate governance safeguards compounded corruption and led to the dismantling of institutions that had earlier protected the forestry sector.⁴¹

The emergence of evidence of a link between weak state institutions and conflict provides a good argument for focusing on the aspects of fragility associated with governance institutions rather than on strict measures of abundance or resource dependence.

MECHANISMS FOR FORESTS TO CONTRIBUTE TO CONFLICT

The data suggest a link between prolonged conflict and timber under some circumstances. What, therefore, are the precise mechanisms through which forests—“conflict timber”⁴²—contribute to conflict? These mechanisms include financial flows from timber revenue or corrupt payments that fund violence; direct engagement in violence or weapons trafficking by loggers or those employed by loggers; and links between logging and other forms of crime and violence.⁴³

Of course, fragility predates conflict, and often sets the stage for it. Reviewed here in turn are the aspects of state fragility that enable conflict timber, including:

- Opaque and unregulated revenue systems for resource rents, and associated corruption.
- Use of forests as patronage and its effect on rights, accountability, and management capacity.
- State absence, allowing transnational organized crime to control timber harvest and traffic.
- Links of predatory states (including their security forces) and illegal loggers to criminal networks.

Unregulated financial flows

Fragile states and insurgencies that control forests and transport points use revenues from timber “taxes” and bribes to fund weapons and other materiel, nationally and locally. Authoritarian states may use timber revenue to fund repression and militarization. Such states may ironically be defined as “stable” in statistical analysis since they suppress insurgencies (often with violence), but this approach entrenches fragility, poverty, and grievance.⁴⁴

Liberia and Cambodia are the best-known examples of timber revenue funding conflict, but not the only ones. Afghanistan, where analysis of insurgency financing has focused on opium, also has a diverse trade in timber, gems, stolen cars, and consumer goods. This trade is an important source of revenue for both the Taliban and the Northern Alliance, particularly in the northwest border regions, where roads are scarce, and transport is easily “taxed.”⁴⁵ Reports suggest that the Taliban impose a 10 percent tax on timber.⁴⁶

In southern Senegal’s fertile Casamance region, the site of a small separatist uprising since the early 1990s, rebel commanders and military officers have taken over the region’s timber production and trade as well as cash-crop farms, including cashews and fruits.⁴⁷ In Somalia the charcoal trade has become one of the most important economic sectors since the 1990s, with significant exports to neighboring countries and even to the Gulf States and Saudi Arabia. Given the lucrative nature of the trade in an otherwise resource-poor country, different clans and insurgent groups have contested its control.⁴⁸

In the Democratic Republic of Congo a United Nations panel of experts in the early 2000s found that the Kabila government had requested logging companies to cut reserve forests in Bas Congo and split the proceeds 50:50 with the government to help finance the war.⁴⁹ Likewise, the Rwandan Patriotic Army’s Congo desk is linked to illicit logging operations in the eastern part of the Democratic Republic of Congo, and Ugandan forces have been linked to illicit trafficking in commodities including timber.⁵⁰

Similarly in the 1980s, insurgencies in Myanmar's Kachin and Karen border states funded themselves primarily from timber sold to China and Thailand.⁵¹ After cease-fires in the early 1990s the government took control of the border timber trade, and apparently tried to use timber as partial payment to China for a \$1.5 billion arms shipment. It also, it seems, tried to barter teak for oil with Iraq in May 2002.⁵² More successfully, the Russian Federation was willing to accept partial payment in teak for 10 Mig-29 fighter jets and nuclear technology.⁵³

Patronage and its effects

Conflict-timber policing has largely focused on unregulated financial flows, but the role of forests in conflict goes further. High-ranking officials in fragile states—using lucrative forest concessions for patronage—fund conflict, enrich themselves, and consolidate their power.⁵⁴ Indeed, even without logging, forests can be a source of private revenue when they are used for patronage. In the Democratic Republic of Congo many of the heavily forested areas fell under rebel control in 1999–2000, while the government retained control of major export transport routes. Thus government-licensed logging concessionaires could not operate, and loggers in rebel territory could not export profitably. But this did not stop speculators (“war profiteers”) from obtaining concession rights to millions of hectares of forest, thereby financing belligerents, including the government.⁵⁵

In Liberia in 2003 the area claimed by logging companies exceeded the entire area of the country's forests 2.5 times. The Liberian government's Forest Concession Review report illustrates how this could happen with a concession allocation process designed for patronage, not forest management:

During 1998 and 1999, after former President Charles Taylor took office, there was another re-allocation process in which Taylor called concession holders to his office and dictated where they would work or not work. The objective was to re-align forest lands into several large concessions. That 'Mega-Concession' policy allowed the inner circle of the country's leadership to hand out concession rights to favored political cronies, militia leaders, and arms dealers.⁵⁶

Representatives of the Liberia Agricultural Logging and Mining Corporation reported that the Mohammed Group of Companies took over their concession area by force and that when they objected, Mohammed Salamé⁵⁷ told them to see Charles Taylor.⁵⁸

Patronage produces several other aspects of fragility. As Liberia illustrates, shifting political and economic alliances produce overlapping claims to concessions. This lack of clear ownership spawns grievances and conflict between local communities and the private sector,⁵⁹ and within local communities and the private sector.⁶⁰ It also increases logging companies' and local users' investment risks.

In Peru, indigenous concerns (over increased access to loggers and to plantation companies, and greater oil exploration on indigenous territories under a new environmental law) have culminated in riots that killed several people.⁶¹

The use of resources for patronage by an authoritarian rentier state also undermines basic democratic principles of a “social contract” between the state and its citizens. Because the state protects its power by patron support derived from preferential allocation of concessions, it has no need to be accountable to its citizens to retain office. It therefore has no incentive to develop strong institutions for good governance, such as the infrastructure for delivering basic services. Citizens that see the state enriching itself while failing to deliver basic services will not view it as legitimate. Their resulting grievances and lack of respect for state authority and rule of law can generate violence.

States that depend on patronage rather than citizen accountability have little incentive for sound forest management and therefore little incentive to develop the necessary capacity and institutions. Their major incentives are to control forest access—protecting patrons’ interests—and to ensure that the proper bribes are paid. They do not choose logging companies for their capacity to manage the resource and therefore these companies often cut corners to recuperate the costs of bribes and of the high security required to operate in a conflict zone. This incentive structure degrades the resource, undermining local livelihoods and the environment (such as clean water and soil fertility), and generates grievances.

There is no clear split between weak fragile states and strong fragile states. States may show strong control over some areas (geographic or sectoral) while neglecting others. The state is, though, often absent in remote forested areas, which can create a vacuum filled by organized crime, especially in porous border areas. This can result in commodity trafficking, private militias, and associated violence and further marginalization of the rural (often minority) poor.⁶²

Subnational pockets of fragility and the struggle for control

State control is not always benevolent, nor do all areas without state presence suffer from crime and violence. Indeed, the state often maintains authoritarian control through violence, while communities on the margins of state control often develop local mechanisms for social order and dispute resolution. At times nonstate actors, even insurgents and criminal organizations, may step into the state-vacated breach to provide basic services.

But where resources are lucrative and outside influences heavy—stimulating strong market demand and an influx of labor, capital, or belligerents (or all three)—local institutions may well be overwhelmed by spillovers, competition for resources, and violence. Long-term examples of these dynamics include Kivu in the Democratic Republic of Congo (and indeed much of the borderlands in the Great Lakes region);⁶³ frontier areas between the Central African Republic, Chad, and Sudan;⁶⁴ the Afghanistan–Pakistan border;⁶⁵ Myanmar’s borders with China and Thailand;⁶⁶ the border between Colombia and Ecuador;⁶⁷ and increasingly the frontier between Mexico and Guatemala.

Criminal and military networks

A predatory state with an agenda for private enrichment through illegally extracting and trading timber and other commodities rarely has in-house the diverse skill set, contacts, and resources needed. Savvy heads of predatory states, like all successful businesspeople, cultivate a complex network of contacts with specialized fixers who procure finance, launder money, transport illicit products (including weapons), falsify documents, and set up shell companies to access international markets for their products. These networks, which span borders and even political, ethnic, and religious divides, foster organized crime, protection rackets, and trafficking of other commodities, which leads to other forms of protracted violence.⁶⁸ The revenue generated encourages financial crime still further, which in turn facilitates other forms of organized crime and conflict financing.

Logging companies in conflict zones also contribute to violence. They have been documented as trafficking in weapons and materiel, underlining their connections to criminal networks.⁶⁹ Because of the high risk to operations in large forest areas, loggers also frequently hire (either voluntarily or under duress by the state or rebel forces controlling the concession area) security forces that take direct part in the conflict as combatants, and attack and loot local communities.⁷⁰ In some places, state security forces are themselves part owners of, or brokers for, logging companies.

IMPACT OF CONFLICT ON FORESTS AND FOREST LIVELIHOODS

Conflict-driven forest loss has a direct impact on the management of global public goods such as forest carbon and biodiversity, on national resource-based economies, and on locally important forest-based livelihoods. (It is irrelevant whether the loss is caused by belligerents using timber to fund conflict or by conflict-affected people seeking access to fuel or alternative livelihoods.) Yet in some cases conflict has acted as a buffer to forest loss by shutting down logging operations, either because it raises security concerns or because it weakens market demand (due to timber sanctions or reputational risks, among other examples).

The quantitative data on the impact of conflict on forests are sparse, and the relevant qualitative data mixed. All data suggest, though, that the impact varies greatly in each conflict and that it changes during the conflict. They also point to some common themes: the strategic role of forests as shelter or as obstructions to combatants; civilian displacements to or from forests; and reliance (by combatants and civilians) on forests for fuel, timber, and protein in the absence of most other economic and livelihood means. This makes forests a field of either competition or collaboration—and therefore a significant factor in resolving or exacerbating conflict.

Impact on forests

Strategic value. For civilians, forests offer refuge and subsistence, especially to those who—ill, lacking information, or simply following tradition—do not flee to organized camps. For combatants, they provide shelter and block access to territory.

For rebel or separatist forces particularly, they are an important place of refuge, and therefore often a site of destruction by the state. Forests might be napalmed, defoliated, logged, or simply become heavily militarized, especially along borders or areas of strategic value. The most infamous example is perhaps Vietnam, where the U.S. Operation Ranch Hand sprayed defoliant on some 6 million acres, destroying both forests and crops, and creating persistent dioxin pollution problems that had long-lasting health effects.⁷¹ Some studies estimated that one spraying of Agent Orange not only defoliated but killed 10 percent of trees, with a very strong effect on the sensitive and ecologically important mangrove forests in the Mekong Delta. They also estimated that about 25 percent of the country's forests were sprayed more than once.⁷²

One study of conflict in Colombia between 1985 and 1997 found that 20 percent of forest was in municipalities suffering from conflict and contestation of political authority from the insurgent Revolutionary Armed Forces of Colombia (FARC), paramilitaries, or both. These forests had been subjected to heavy herbicide spraying to eradicate coca and poppy plantations, which devastated forests and local livelihoods.⁷³ In Nepal the Communist People's Liberation Army and the Royal Nepal Army cleared forests for military installations and training.⁷⁴ In Sudan there is evidence from Darfur that trees were deliberately destroyed by militia in an attempt to sever community ties and reduce possibilities for resettlement.⁷⁵

Forests, sometimes seen as an obstacle to access, are cleared to make strategic roads for moving troops and weapons. In 1991 the Rwandan army cut a swath 50–100 meters wide through the bamboo forest connecting the Virunga volcanoes to reduce the chance of ambush along a key trail.⁷⁶ In Mozambique, the forest in the Beira–Machipanda transport corridor linking Beira port to Zimbabwe was cleared of vegetation for security purposes, to reduce the risk of attack by RENAMO forces.⁷⁷ But once roads are open, loggers, agricultural pioneers, and hunters follow, bringing further harm to the forest.

Loss of forest management staff and funding. Case studies find overwhelmingly that an important but often overlooked consequence of conflict is loss of management staff, theft or destruction of resources necessary for oversight, and redirection of what little funding existed for management and conservation of forests.⁷⁸ Forest management authority and conservation patrol posts, for example, were attacked, occupied, burned, or looted by combatants on both sides of conflicts in the Central African Republic, the Democratic Republic of Congo, Ethiopia, Mozambique, Nepal, and Rwanda.⁷⁹ Forestry and park staff either fled as the conflict approached, were attacked and sometimes killed, or taken hostage—leaving the forests unprotected. At times, committed junior staff⁸⁰ and local communities⁸¹ helped maintain some protection. Some cases studies from Nepal even show that community-based forestry operations remained unmolested during the conflict, managing the forest and maintaining local incomes from a local sawmill—even though state institutions had virtually collapsed.⁸²

Displacement. The violence and persecution of conflict can suddenly displace dense waves of civilians that strain social, financial, and environmental resources. Refugees and internally displaced people—housed in formal camps or fending for themselves—experience radical and life-threatening loss of or disruption to livelihood, shelter, social networks, and assets. Since they obviously place their needs for short-term survival first, they rarely follow sustainable practices, especially as they are in unfamiliar ecosystems.

Hundreds of thousands—if not millions—of people in small areas and their demands for construction materials and fuelwood, as well as sanitation and water, devastate the local environment and the regenerative capacity of its vegetation. Donors have only recently begun to recognize these impacts. Under pressure from frequent looting and displacement, civilian livelihoods shift from agriculture and pastoralism to hunting, gathering, and commercial extraction of the most accessible and easily extracted commodities—often forest products. If animals and seeds are available and have not been eaten, the displaced population may (re) engage in agriculture and livestock husbandry around their temporary home, clearing forest and potentially introducing exotic species in the process. Selling fuelwood is often one of the only means of income in camps (box 1.1).⁸³

BOX 1.1. CHARCOAL AND FUELWOOD USE IN CONFLICT-AFFECTED COMMUNITIES IN THE DEMOCRATIC REPUBLIC OF CONGO AND TANZANIA

520,000 with the influx of Rwandan refugees after the genocide in 1994 and the various cycles of violent conflict and displacement that followed. The fuelwood demand for such a population is huge, such that firewood collectors have to venture ever farther away, mainly into the densely wooded areas of Virunga National Park, where according to some estimates at least 3–4 hectares of tropical forest disappear every month. With few other sources of income, several thousand people rely on collecting wood, producing charcoal, and their transport and trade.

Fuel collection and charcoal production are also closely linked to local combat economies. According to some reports, Kirolirwe in Masisi territory, some 100 kilometers north of Goma and just west of Virunga National Park, has a large market for charcoal. This market was apparently set up by renegade general Laurent Nkunda and his CNDP (Conseil National de Défense du Peuple) rebel group in 2004. The rebel leaders seem to encourage locals to cut wood in the park and produce charcoal in the areas they control. On the other side, many wives of military personnel are involved in collecting and trading fuelwood in areas controlled by Congolese forces, according to some reports.

In Tanzania's Greater Benaco camps refugees, immediately after their arrival in 1994, began felling trees for the construction of shelters and fuel for cooking, heating, lighting, and brewing. In December that year their daily fuel wood consumption was substantial, at 1,200 tonnes. They initially gathered nearby dead wood, but within a year, they were forced to collect and cut wood some 10 kilometers away. Such huge demand severely deforested the surrounding savannah woodlands.

Satellite and aerial photos taken in 1996 revealed more than 20,600 hectares of completely, and a further 47,000 hectares of moderately, deforested land. In some areas, even stumps were uprooted, exposing the soil to erosion and endangering soil fertility. The effects of reduced vegetation cover included soil erosion on slopes, reduction in soil organic matter and nutrients, diminished water retention capacity, reduced soil depth required for root growth, and uncontrolled bush fires, with a resulting marked reduction in soil fertility.

In December 1996 the refugees were forcibly repatriated to Rwanda. The impact of forest clearance, even with secondary growth beginning to emerge, was still evident a decade later.

Source: Jambiya and others 2007; IRIN 2009.

Goma, the capital of North Kivu province in the Democratic Republic of Congo, is near some of the most biodiverse forests in the world. It was already the province's largest city when its population swelled from some 30,000 to **Wildlife**. Quantitative data of the harm to wildlife from increased bushmeat trade during conflict are scarce, but what data do exist are dramatic (figure 1.3). In conflicts, civilian hunting rises due to displacement to the forest (or nearby refugee camps where food rations are insufficient) and due to the loss of other livelihoods, such as farming and livestock from looting. Wildlife are also exposed to death from landmines; disturbance to migration, feeding, and reproduction patterns; and loss of habitat.

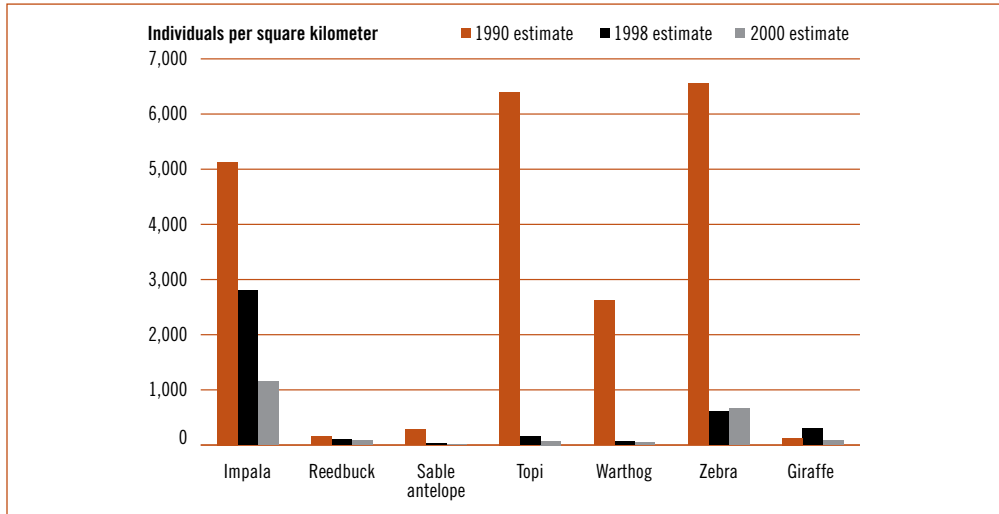
As civilians are pushed to subsistence during conflict, state and nonstate combatants often camp in remote sites without provisions, relying on what they can hunt and loot from civilians. Belligerents, like civilians, also hunt for subsistence and trading purposes—and the proliferation of weapons around forests makes combatants' hunting very efficient.

In Tanzania TRAFFIC has documented how numerous protected wildlife-rich areas were heavily affected by the influx of some 800,000 Rwandan refugees in the mid-1990s. Rwandans traditionally eat a high-protein diet from cattle, but they lost most of these animals before or during their sudden flight. They experienced food shortages in the camps, and rations—even when available—were deficient in protein. So they turned to bushmeat, hunting with snares, nets, and firearms.⁸⁴ (Hunting also provided income. A daily bushmeat market was apparently held in one of the camps with carcasses hung for sale, openly, while in other camps bushmeat was traded clandestinely at night, and referred to as “night-time spinach!”)⁸⁵

The impacts on wildlife were significant. Burigi Game Reserve, previously renowned for its diverse and large populations of wildlife, saw its large-mammal populations crash by 60–90 percent in 1994–96, at the peak of the refugee influx.⁸⁶

In a spillover effect from the war in Sudan (and later the Democratic Republic of Congo), wildlife in Garamba National Park, just across the border, was heavily exploited by combatants, traders, and impoverished locals. Patrol monitoring and maps show that the poaching moved steadily south through the park, killing large mammals—initially buffalo and later elephants. In the early 1990s combatants from the Sudan People's Liberation Army based on the Sudan side of the border were heavily involved. The poaching became especially severe when, due to the onset of the Democratic Republic of Congo's own war, park guards were disarmed and enforcement came to virtual standstill. In a brief period the populations of elephants fell by one-half, buffaloes by two-thirds, and hippos by three-quarters.⁸⁷

FIGURE 1.3. ANIMAL POPULATION TRENDS IN THE BURIGI GAME RESERVE, TANZANIA 1990- 2000



Source: Jambiya and others 2007 (from aerial surveys of the Tanzanian Wildlife Conservation Monitoring Unit, MNRT 2005).

Mozambique's Gorongosa National Park and Morromeu Reserve suffered massive declines in large-mammal populations from combatants stationed nearby for long periods.⁸⁸ Surveys in 1994 (two years after the end of the war) showed that in Gorongosa, the elephant population declined to some 100 individuals from about 3,000 before the conflict. Former populations of buffaloes (about 14,000), hippos (some 4,800), and wildebeest (about 5,500) were virtually wiped out. Only 129 waterbuck remained of a previous count of 3,500.⁸⁹ The Central African Republic also saw massive falls in populations of elephants (by some 90 percent) and rhinos (virtually extirpated from a population of 10,000).⁹⁰

Anecdotal evidence from Afghanistan suggests that a combination of the war, a change in dynamics of war-related hunting, trade and environmental factors, as well as population movements have pushed some species to the brink of extinction. The importance of the mountains as strategic frontlines has brought heavy fighting and pushed wildlife to the valleys, where they are easily targeted by hungry villagers and combatants with a ready supply of firearms.

Surveys and compilations by the United Nations Environment Programme (UNEP) of local sightings suggest that Afghanistan's populations of lions, leopards, wolves, and foxes have been severely depleted.⁹¹ Marco Polo sheep are also in severe decline. In 2005 one of two remaining populations of Siberian crane was thought to be down to just one pair and a single chick: their migration had been disrupted by a 2001 U.S. bombing campaign⁹² and by pollution of wetlands along their migration route.⁹³ Falcons, once common in the mountains, are now rare due to increased trade to meet demand from Arab countries, where they are highly prized for their hunting ability. The Asiatic wild ass, once common in the Hindu Kush, appears to have disappeared completely.⁹⁴ The number of snow leopards, one of the world's rarest animals, is estimated to have fallen to around 100. Ironically, some of this decline may be attributable to donor and peacekeeping forces: one source, citing UNEP, states that they were buying skins in Kabul markets, increasing demand and driving up the price.⁹⁵

Land seizure and conversion. Conflict often leads to loss of resource rights and access. Alvarez notes widespread Colombian forest fragmentation as coca farms expand and as paramilitaries seize land for conversion to cattle ranches and agricultural plantations.⁹⁶ Some argue that coca-eradication programs may have led to greater conversion pressure as displaced farmers seek new land to recover lost revenue.⁹⁷

Farah documents how the increased global demand for palm oil sparked violent land seizures in rural Colombia by paramilitaries, who drove traditional Afro-Colombian communities off the land they collectively owned under indigenous title (and with constitutionally recognized rights). The seized land was then classified as “without owner” because the community had been scattered and no longer existed in its original form and location. It was then sold or rented by the government or new owner to businesses, who converted it from forest and traditional subsistence agriculture to large palm plantations, some of which, ironically, received development subsidies from the U.S. Plan Colombia.⁹⁸

Likewise, in its environmental assessment of Afghanistan, UNEP found that in 2003 more than 50 percent of the natural pistachio woodlands had been cut for selling wood for income or for stockpiling fuelwood, out of fear that access to forests would be lost when it was seized by others. UNEP analysts argued that this decision has further degraded natural assets by increasing soil erosion and by reducing water quality and quantity, in this way obstructing regeneration as well as further exacerbating existing water scarcity.

Positive effects on forests. Conflict can also at times be positive for forests. For example, if the security situation deteriorates so that the logging industry abandons concessions and local communities flee their homes or do not enter the forest, pressure from logging and hunting falls. Or areas cultivated for agriculture may be abandoned and therefore revert to forest. Equally, rebel and government demands for “taxes” on forest products may discourage exploitation—a side effect that one author has referred to as “gunpoint conservation.”⁹⁹ This, however, is rare and fleeting. Indeed, if the security situation has deteriorated, it implies the presence of armed forces who are likely to hunt and extract timber themselves. Similarly, the negative impacts may only be displaced from one forest to another if people are driven to use more marginal and ecologically sensitive areas for agriculture, logging, or fuel.¹⁰⁰

At least one study has shown that during the civil war in Eritrea, fear of the military and use of landmines significantly reduced forest use and livestock grazing, with a positive effect on vegetation regrowth.¹⁰¹ Reports suggest that biodiversity and forest cover improved (at least temporarily) because of violence-related or insecurity-related declines in use in Aceh,¹⁰² Malaysia,¹⁰³ Mozambique,¹⁰⁴ Myanmar,¹⁰⁵ Nepal,¹⁰⁶ Nicaragua,¹⁰⁷ and the demilitarized zone on the Korean peninsula.¹⁰⁸ The protective effect on forest cover can persist for some time after the conflict has ended, if land mines were used and are not quickly cleared (though they obviously harm large wildlife).

Another potential positive effect of conflict on forests is the raised awareness, among government and humanitarian agencies and the public, of forests' importance as a safety net for subsistence and shelter during a crisis. This recognition may help to spark cooperation to protect forests—through community-based management, transborder protected-area management, and coordination across sectors (humanitarian,

nature protection, security, and development agencies).¹⁰⁹ For example, the governor of Aceh (a former rebel commander) has engaged with carbon-trading partners to generate funds for its vast national forest, while employing thousands of ex-combatants and conflict-affected community members as wardens.

Impact on forest livelihoods

The recent focus on the “greed or grievance” hypothesis has directed much attention to the economic activities of elite combatants and the need to disrupt their sources of conflict financing. War economies, though, engage complex networks of actors at all levels of society, some of whom may have few other opportunities for livelihood in times of conflict when the formal economy is in ruins or may have abandoned other livelihoods, such as farming, because of looting and insecurity. It is therefore useful, with poverty reduction in mind, to distinguish among “combat,” “shadow,” and “coping” economies and to stress the importance of livelihood analysis that focuses not on material assets themselves, but on different capacities to access adequate resources.¹¹⁰

Forests as safety nets. Forests provide essential products (protein, fuel, medicines, and construction materials), essential functions (subsistence, employment, and goods for sale), and indirect benefits (land for other uses such as fertile agricultural land, ecosystem services, and social and cultural uses). The role of forests is most critical for those who are already the most vulnerable—the rural poor¹¹¹ and women.¹¹² With few other assets, these two groups rely on forest products to an even larger degree during seasonal or temporary hardship, in periods of climatic extremes, or when the previous year’s crop has been consumed and new crops have not been harvested. At these times, forests often are the main food and income source for poor households.¹¹³

The vulnerability of the poor is increased by conflict, and forests are vital safety nets when they and other civilians flee to forests for refuge, shelter, and emergency subsistence. But such displacement disrupts social networks for reciprocal labor and access to credit. Looting and labor shortages due to displacement, recruitment into fighting forces, and illness from fighting make it difficult to rely on livelihoods from maintenance or accumulation of immobile assets that require time to mature. However, to the extent that conflicts occur in or near forests, insecurity may preclude forest livelihood activities.

Timber sanctions. Local livelihoods suffer when combatants in resource areas require locals to supply goods or “taxes” on forest products. Further, even “smart” sanctions (that is, those designed to target individual commodities) may have the unintended consequence of harming those pushed into these sectors as a survival strategy. UN sanctions to obstruct the international marketing of conflict timber have been imposed only on Liberia, but may have had unintended negative consequences for coping livelihoods by reducing international demand for Liberian timber and local logging employment.

Even so, the only formal assessment of the impact of timber sanctions on forest livelihoods in Liberia was a desk study (given combat conditions), and the assessment admits that “sources must be treated with caution, however, given the overt inconsistencies in the data, and questions regarding the reliability and integrity of reported statistics.”¹¹⁴ It is also difficult to estimate the impact precisely because of the informal

nature of the coping economy. But an analysis of the available information suggests the impact was likely small on the livelihoods of the poor.

Given the size and the importance of the forestry sector in Liberia during the war—accounting for nearly a fourth of the country's GDP and more than half the export revenue in the early 2000s—a sudden halt to all timber export activities could have had serious economic consequences. In fact, sanctions against Liberian timber exports were indeed effective in that large-scale logging for export stopped completely after the imposition of the embargo in July 2003. But much logging had already ceased because of insecurity and widespread looting during the conflict. In addition, given the nature of the Liberian export timber sector and its small role played in the livelihoods of rural households, the direct economic impact on the poor seems to have been limited.

Further, despite the importance of timber exports to GDP and government revenue, the share of timber receipts that went to the national budget was small relative to total receipts. Estimated government revenue from timber exports in 2002 was approximately \$13 million, a small proportion of total exports of up to \$200 million.¹¹⁵ The government budget was already minimal and most social spending was provided by international donors. Most of the income from timber exports benefited logging companies and President Taylor personally.¹¹⁶

In addition, although estimates suggest that the logging companies employed some 5,000–8,000 workers in Liberia in the early 2000s, about a third of the jobs were filled by expatriate workers. Most of the Liberians hired by these companies were casual day laborers, paid \$1–\$2 a day. Due to the high seasonality (most roads in the interior are impassable during the rainy season) and transient nature of the logging business and war-related instability, most employment was sporadic.¹¹⁷

Rural communities might have benefited from demand for local products and food from company employees and from social services such as health care and educational facilities promised by the companies. Given the widespread use of forests as patronage, however, and the general lack of oversight in the sector, many companies routinely failed to fulfill promises to provide community facilities.¹¹⁸ In a 2002 survey in Liberia 90 percent of rural communities had no access to clean water, sanitary services, schools, or clinics—and there was no difference between communities inside or outside logging concession areas.¹¹⁹

So, while the income from employment in logging might have made a significant seasonal contribution to some households, the overall importance of employment or demand for local products seems to have been limited for rural livelihoods. Any potential income benefits must also be weighed against the consequences of deforestation, dangerous working conditions, and sexual exploitation of women and girls in logging areas.¹²⁰

In addition, such income benefits might have been offset by an unintended boost that the local small logging operations received from the cessation of large-scale timber logging.¹²¹ As a result, one longer term effect of the timber sanctions was to open space in the domestic timber market for large numbers of chainsaw loggers to expand these smaller operations, bringing economic opportunity to many rural households—though local political and village elites with access to credit and political networks are likely to be the main beneficiaries.

Nevertheless, many authors have expressed concern that livelihoods of the already vulnerable poor will bear the brunt of recent increased attention to cutting the lines of conflict commodities,¹²² and indeed of forest law enforcement more generally.¹²³ They note that policymakers must distinguish between commercial use of timber and forest products in coping economies and in combat economies to avoid unintended consequences for conflict-affected civilians.¹²⁴

In many countries legislation that defines legal forest use prohibits community activities such as subsistence and small commercial logging, fuelwood collection, and hunting on state forests. And given the frequent lack of political will to target powerful industrial operators (many of whom may have received their concessions in return for political patronage), law enforcement efforts often focus disproportionately on small operators.¹²⁵ It is therefore vital that today's increasing attention to targeted "smart sanctions" be accompanied by robust monitoring and flexible responses, to mitigate the sanctions' economic impacts on the rural poor.

POSTCONFLICT PRESSURES ON FORESTS AND LIVELIHOODS

The end of conflict does not mean that the forest returns to its preconflict conditions. Reconstruction, increased populations, new roads, slow political reforms, weak forest management, speculative investors, and trade-offs with ex-combatants for short-term stability—all put heavy demands on forests, including wildlife. At the same time, postconflict industrial logging, often used to jump-start recovery, can undermine smallholder access and the health of forests, both crucial for local livelihoods.

Pressures on forests

Postconflict effects on forests are generally less ambiguous than those of the conflict itself, which at least has some positive effects. Once the conflict is over, civilians and ex-combatants urgently need employment, while the state needs quick revenue for reconstruction and for reducing poverty in order to visibly demonstrate a "peace dividend." But without strong political will and capacity for fundamental forest reform, these pressures often stimulate logging or forest clearing for plantations or smallholder agriculture, often seen as quick and cheap ways to generate employment and revenue. One of the easiest sources of financial and political capital is the asset-stripping of natural capital.

Demand for timber in postconflict settings is high. Governments frequently turn to construction as an easy way to generate jobs quickly, adding to the demand for wood from infrastructure rebuilding and from servicing the influx of foreign aid workers. The Food and Agriculture Organization estimated that wood demand in postconflict and post-tsunami Aceh, solely to rebuild homes, was over 650,000 cubic meters (roundwood equivalent), much of it supplied by ex-combatants involved in illegal logging.¹²⁶ In Liberia it put the increased demand for timber in reconstruction at 40,000 cubic meters annually, for a total annual wood demand of some 100,000 cubic meters.¹²⁷ In addition, displaced people and combatants who abandoned their homes during the war begin to return or are resettled in or near forested areas and take up livelihoods in clearing land for agriculture or livestock, or felling trees for timber or charcoal production and sale.

Although access to forests increases quickly after conflict with new and repaired roads and an increased population, reforming forest management and strengthening law enforcement, as political endeavors, often lag behind.¹²⁸ The rising pressures on forests therefore rarely have accompanying safeguards against destructive harvesting.

Wildlife. The end of conflict seldom ends the pressure on wildlife, because access to wildlife generally improves ahead of adequate law enforcement. Hatton and colleagues reported that after the end of the war in Mozambique (1995), reconstruction programs focused on de-mining and rehabilitating roads and bridges, which improved access to wildlife areas.¹²⁹ And although returning refugees initially received food aid, they hunted for protein to supplement their diets, targeting small mammals and birds, since larger species were already scarce. The market for bushmeat boomed, in rural and urban markets and along major roads, because most livestock had been looted or eaten during the war.

Hatton and colleagues reported that postconflict illegal logging followed a similar pattern. As a result of the severe depletion during the conflict of these natural assets, which otherwise could have made a rapid recovery, they noted that “rural communities and the private sector are now faced with a considerably depleted resource base for future economic activities.”¹³⁰

Postconflict pressures also harm wildlife when land is removed from a “protected areas” list, to support resettlement of refugees or ex-combatants (or both).¹³¹ In Rwanda two-thirds of the original area of Akagera National Park was removed from protected status for resettlement of refugees and their livestock. The result was the virtual local extinction of some species of ungulates, including the roan antelope and the eland.¹³² In northwestern Rwanda the Gishwati Forest Reserve was degazetted to provide land to returning refugees. It was also exploited as pastureland by absentee ranchers.

Speculators. Another pressure comes from the type of investors likely to be attracted to postconflict environments—frequently speculators or companies looking for high returns and willing to cut corners to offset high risk.¹³³ As mentioned, many speculators delay production (and indeed may not even have the capacity to log) as they wait to sell their rights at a higher price. Some may seek to deplete forest assets as rapidly as possible while neglecting environmental remediation and management responsibilities, as well as obligations to local communities.¹³⁴

Elite concessions. Governments often regard the support of domestic political and economic elites as critical for stability during a fragile transition, buying them off with forests and other resources, perhaps through a forest concession, watered-down regulation, or lax enforcement (essentially, the patronage model continued).

As noted, in some cases conflict may bring cooperation for protecting forests, but in others it may lead to warring parties and political elites cooperating to exploit and destroy forests more rapidly. Indeed, the prospect of cooperation in exploiting lucrative timber resources is sometimes enough to bring warring parties to cease-fires, as in Myanmar.¹³⁵

In Cambodia postwar elections in mid-1993 led to a power-sharing government and an agreement to divide receipts from logging operations, causing unprecedented deforestation, particularly to 1995 (box 1.2).¹³⁶ International donor pressure had led to a nominal moratorium on logging and timber exports from 1992 to 1996, though enforcement was lax, and the ban was suspended on five occasions in that period.¹³⁷

BOX 1.2. WAR AND POSTWAR IMPACTS ON FOREST LIVELIHOODS IN CAMBODIA

Forests in Cambodia, as in many developing countries, are essential to rural livelihoods. A source of nutrition, they help diversify seasonal subsistence strategies in offering insurance against the risks of rain-fed agriculture and in generating income from forest products. Since the late 1980s, however, various political elites have cooperated in destroying much of the country's forests.

In the late 1980s the country's forest cover was more than 60 percent, but as the Khmer Rouge gained control of forested territory near the Thai border, timber became an easily looted asset to fund conflict and enrich commanders, and was widely logged with the help of the Thai military and authorities. In the early 1990s, with political instability that followed the Paris Peace Agreement, members of the Cambodian military forces, government, and political parties made deals with international logging companies to secure financial resources to sustain their positions and institutions, and to build broader networks of power and influence. With the power sharing that resulted from elections in the mid-1990s, forests were used as bargaining chips, with opposition political groups agreeing to share access to logging revenue. All these elements drove the pace of destructive logging.

Widespread corruption meant that few proceeds from this large harvest became government revenue. Officially, the government received some \$120 million from 1989 to 1999 on timber exports valued at \$2.4 billion (or 5 percent of the total).

For their part, international donors, heavily involved in rebuilding Cambodia after the Paris Peace Agreement, favored an agenda of sustainable development and environmental protection, but proved incapable of bringing the rule of law. As the 2006 World Bank Inspection Panel on Cambodia put it:

The Panel finds that in the Project's focus on concessions, other aspects that were important to the [World] Bank program in Cambodia and the Government were largely ignored or at least marginalized throughout the planning phase of the Project. In this regard, the Panel finds that the Project did not give adequate attention to the vital interests of local communities and indigenous peoples in forest resources, and to the contested nature of the forest domain.

Communities were not consulted nor paid adequate compensation, the Panel found. They also saw their resource base destroyed and with it, livelihood options. This was especially evident in the loss of resin trees used in the production of torches, paints, and varnishes, and in medicine. Many resin tappers earned monthly incomes of \$36–\$50 from selling resin for 10 months of the year and during rational management of the sector. Again, the Inspection Panel reported:

(continued)

In one village, families who claimed 500 to 700 resin trees were reportedly left with just 50 trees within three years. Apart from impact on livelihood options, longer-term damage to the forest ecology and thus for agricultural productivity has resulted in erosion, reduced water tables in the uplands and increased flooding in the lowlands.

The continued use during peacetime of forests for patronage and personal enrichment has produced little appetite for forest reform among the political elite in postconflict Cambodia. Although the government undertook a concession review with Asian Development Bank funding in 1999, when remaining operators failed to provide management plans within one year as required and their concessions were not terminated, it was clear that reform was unlikely. This failure to reform forest governance institutions ensured the continued destruction of both forests and forest livelihoods.

Source: World Bank Investigation Panel 2006; Global Witness 2002; Le Billon 2002.

In the Democratic Republic of Congo, following recommendations in the 2002 UN Panel of Experts report, the Sun City power-sharing agreement called for a review of all forest contracts allocated during the conflict. As a result of that review, article 5 of the new forestry act set forth simple criteria for cancellation. The result was to cancel 25.5 million hectares of noncompliant concessions, and place a moratorium on the allocation of any new concessions. Nevertheless, after this moratorium, the government still signed 100 new contracts for 2.4 million hectares, arguing that it was in the national interest.¹³⁸

Decentralization and customary rights. More positively, postconflict environments have sometimes decentralized authority over resources and their revenues (Aceh) or have legally recognized customary rights (Liberia, Mozambique, and Nepal). The aims were to reduce forest destruction under central administrations with little benefit for local communities, as well as to make state agencies more efficient and accountable. Indeed, this recognition of local autonomy was a central condition of some peace agreements, including south Sudan and Aceh, and still is for the Moro Islamic Liberation Front in its negotiations with the government of the Philippines.

Regional autonomy and decentralization of authority are not the same as recognition of customary rights. As Ribot and colleagues point out for Indonesia, Nicaragua, Uganda, and elsewhere, decentralization was undertaken to reposition authority with local government agencies, which nonetheless were ultimately accountable to the central government.¹³⁹ In many cases (for better or worse) this strengthens state authority in the periphery where it previously had only tenuous reach. Recognition of customary rights, in contrast, relates to local authority and institutions.

Without careful oversight, efforts to legally recognize customary rights over forests have the potential for being co-opted by local elites. In some countries, well meaning and, indeed, quite progressive legislation which seeks to strengthen local rights over forests, may be undermined if it is not accompanied by oversight arrangements to reduce conflicts of interest. In Liberia, for example, the recently passed Community Rights

Law¹⁴⁰ provides a constructive framework for greater community consultation about forest use and for the sharing of benefits from forest management by mandating the establishment of local committees (on which local parliamentarians are represented) to oversee community forest ventures. Critics have noted, however, that provisions for oversight are weak.¹⁴¹ Community forest committees are freely able to enter into sole-sourced forest concession agreements (albeit within mandated limits) without seeking competitive tenders from potential concessionaires. The mixing of politics and forest concession management can be highly corrupting, and unless there are clear accountability mechanisms, positive incentives for sound management and oversight – even under the guise of “democratizing” forest use – may not be in the long-term interests of either forests or local people, and could lead to more localized corruption and faster forest destruction.

In short, unless crafted to create local accountability, positive incentives for sound management and oversight mechanisms—even what is often billed as a “democratization” of forest use—may not be in the long-term interests of either forests or local people, and may lead to more localized corruption and faster forest destruction.

Short-term trade-offs versus long-term reform. Security is a high priority in the often fragile environment that follows peace agreements, as is resolving high unemployment and the lack of income generation. The parties therefore often make trade-offs, allowing ex-combatants’ illegal resource extraction to maintain short-term stability. These trade-offs may, however, disenfranchise local communities and, ironically, exacerbate the security situation, by undermining the long-term goals of deeper and more difficult reform.

In many recent conflicts where lootable natural resources played a central role, control of the extraction and trade of resources such as forest products is important not only for environmental protection and sound management of natural capital, but also for security concerns. Yet the sound and equitable regulation of natural resources, even when they were significant sources of grievance or conflict funding, are topics that rarely figure in peace negotiations or planning for ex-combatant peacetime employment. To the degree that natural resources are considered, they are treated as bargaining chips to induce fighters to lay down arms (as in Angola, Liberia, and Sierra Leone). Further, in the urgency to disarm combatants and establish security, the cross-sectoral impacts of interventions such as disarmament, demobilization, and reintegration on forests have rarely been the subject of analysis or responsive planning.¹⁴²

The difficulties routinely faced in postconflict environments also represent threats to the control and management of lootable forests. These difficulties include the continued availability of weapons, persistence of command structures, widespread unemployment, and difficulty in creating alternative livelihoods for fighters. They may be coupled with criminal experience gained during wartime, eroded social networks, dysfunctional law enforcement and forestry agencies, and high demand for raw resources for reconstruction and recovery. When they are, the difficulties feed an illicit economy of forest extraction by ex-combatants and corrupt government partners, which can disadvantage the livelihoods of conflict-affected local communities, and flare up into renewed violence of various types, including a return to full, armed combat.¹⁴³

In Nicaragua the government downsized its army after the civil war in 1990, putting tens of thousands of soldiers out of work, who joined the roughly 22,000 insurgents who had laid down their arms. Many of these

ex-combatants were resettled in “development poles” and security zones in areas of dense forest that the government deemed unclaimed. Not long afterward, for various reasons, factions of former Sandinista, resistance, and indigenous Miskito fighters rearmed themselves, funded in part by revenue from timber and agriculture in the forested regions.¹⁴⁴

Pressures on livelihoods

Many postconflict governments—sometimes supported by donors—prioritize natural resource extraction through industrial concessions, including logging, to jump-start economic recovery. Arguably, this emphasis can disadvantage local communities by reducing their access to forests,¹⁴⁵ and damage the forest health important to local livelihoods. It also compounds the negative impacts on rural forest livelihoods of a disproportionate law-enforcement focus on small operators,¹⁴⁶ while a rush to allocate large concessions can result in a resource grab by the political elite. Without specific safeguards, postconflict activity further entrenches these inequities.

In Mozambique Hatton and colleagues report that in the initial postwar economic rush to increase investment, different levels of government granted concessions, without coordinating them between sectors.¹⁴⁷ Further, “the process of granting concessions was not consultative, especially with regard to local communities living in the areas concerned. Consequently, the same area of land was sometimes granted to different concession seekers, and often there was conflict with local communities. In some cases, (displaced) local communities returning to their places of origin discovered that tracts of land had been requested or given over to outsiders... Concessions were even allocated in protected areas, at a time when management had not yet been re-established in most protected areas.”¹⁴⁸

Hatton and colleagues also report that, due to the dearth of information and weakened state institutions before the war in Mozambique, land use zones (including boundaries to protected areas) were not well known, resulting in frequent overlap with concessions. In something of an understatement, they note that, “with the transition to peace and associated shifts in power, corruption in some cases became a factor in the allocation, control, and use of land and natural resources.”¹⁴⁹

Postconflict emphasis on industrial logging has many causes. Planners may overestimate the potential contribution of industrial concessions (and even the forestry sector generally) because of sparse and flawed data about the size of the industry under conflict conditions and the forests’ potential. They may also have an overoptimistic view of private sector capacity, or be under political pressure to kick-start the economy and employment (and reward political favors or neutralize opponents).

These factors frequently lead planners to rely on the concession model, where forest harvesting outpaces regulatory reform and enforcement capacity, resulting in missed projections for government revenue that can undermine reconstruction and poverty reduction. Governments’ failure to reduce poverty can erode their citizens’ trust in their ability to deliver the promised “peace dividend.” Crucially, if concessions are allocated ahead of adequate oversight capacities, a return to “business as usual” could precipitate a return to loggers fueling conflict.¹⁵⁰

ADDRESSING FRAGILITY IN CONFLICT-AFFECTED FORESTRY SECTORS

The characteristics of state fragility that lead to forests playing a role in conflict, as shown above, include opaque financial flows, use of forests for patronage, state corruption and partnership with criminal networks, incapable state institutions, unaccountable security forces employed by logging companies, general absence of the rule of law, and a lack of accountability and a social contract with local communities.

In addition, overemphasis by government and their donor partners on industrial concession models without fundamental reforms to address these weaknesses has not protected forests or produced revenue for poverty reduction, especially when this model disenfranchises the rural poor. In this, governments and donors should take a two-pronged approach that supports both sustainable and equitable community use and reforms for larger operations.

Best practices in forest governance

The donor community, looking to improve governance capabilities, should address weaknesses in fragile and conflict-affected states in five areas.

- *Clear tenure, based on law.* This entails a concession review process to assess the legality of prior allocations, land reform to address inequities in legal recognition of customary and women's land rights, and a specialized institutional mechanism to mediate conflicts.
- *Participation, especially of forest-dependent communities, in forest management decisionmaking.* This requires support and empowerment of community-forest management institutions, as well as capacity building and protection for a strong civil society.
- *Anticorruption.* This needs regulations on and transparency in concession allocation, involving competitive bidding to avoid concessions used as patronage. It also requires robust reporting and transparency mechanisms, including timber chain-of-custody and revenue-tracking systems.
- *Penalties and functional enforcement of forest and finance regulations.*
- *Cooperative regional approaches* to forest management, forest-product trade regulation, and enforcement.

These reforms are needed in most fragile states with a significant forestry sector, and are not unique to postconflict situations. Indeed, they have been widely discussed in policy circles as pillars of sound forest management,¹⁵¹ especially given the myriad Forest Law Enforcement, Governance, and Trade initiatives and emerging debates on Reducing Emissions from Deforestation and Forest Degradation (REDD). An in-depth discussion of the rationale for each is therefore beyond the scope of this chapter. However, the postconflict environment brings unique pressures and opportunities in relation to these reforms that should be carefully borne in mind. This chapter argues – rather than replacing one template with another – for a more flexible analysis of which programs are most urgent and how to build constituencies and momentum for reform. Success will improve ownership and chances for successful implementation.

Triage and avoiding pitfalls of short-term trade-offs

After conflict, citizens and donors both have a sense of urgency and high expectations, which frequently generate an expansive, overambitious agenda. Expectations are highest just when capacity is lowest. So while there is often potential for change not found in other fragile contexts, citizens are impatient and easily disappointed. Political opposition to the transitional government may use this frustration to bolster a spoiler movement that threatens the peace. The stakes are high – some 40 percent of postconflict countries return to armed violence within 10 years of a peace agreement.¹⁵² This rate excludes the violence that morphs into new forms such as gang, ethnic, or political violence.

The delicate nature of the transition makes it tempting to make short-term trade-offs in the interests of security. But that may undercut long-term reforms and sustainable management, undermining poverty reduction and conflict prevention. A full but urgent agenda therefore requires a triage. Although it has an unavoidable tension between short-term and long-term goals, decisionmakers should ensure that short-term stability does not facilitate a return to the prewar situation, undercutting longer term peace and sustainability. Fortunately, peacekeepers should be able to help neutralize the threat posed by spoilers, so they should think about how they can take a more active role in resource management and coordinate with forest planners in areas relevant to security.

Still, some elements of a triage approach include looking for immediate, visible impacts. These could include paying forest officials' salaries on time and granting logging permits for small operators to help meet specific reconstruction needs. Decisionmakers should assess which steps have the most potential to build confidence and ownership – thus paving the way for further reforms such as concession review – and not immediately devote many resources to achieving longer term, more contentious, and time-consuming tasks, like rewriting forest laws.

Another important element in the momentum for change is that donor attention and aid are highest in the first three to five years of a peace agreement. After that they begin to taper off, just when institutional capacity has had time to improve. It has become a mantra in conflict-development papers, but bears repeating, that donors should be prepared for long-term commitment – around 10 years.

Targeting conflict-affected populations

Conflict-affected populations are highly vulnerable after conflict. Already poor before the conflict, many have since suffered loss of homes, assets, family members, personal injury, and psychological trauma, all contributing to further poverty. To reduce poverty it is therefore critical to consult with the most vulnerable first, to identify their most urgent needs (relevant to the forestry sector).

Women – many are household heads, widowed in the conflict – are disadvantaged by quick-impact employment projects that focus on male-dominated sectors such as construction or resource extraction. Indeed, logging and mining projects may undermine female-dominated sectors such as agriculture. Further, land-tenure reforms may perpetuate the lack of women's land rights in the name of "tradition" – an especially important issue given the proportion of female-headed households after conflict.

Targeting the economic needs of conflict-affected populations may involve assessing the potential and risks of formalizing informal artisanal uses of the forest, such as small logging and charcoal production, which many conflict-affected populations depend on.¹⁵³ Reconstruction booms may be at least partly met from local sources, if regulation avoids destructive harvesting. Such initiatives must, however, take into account supply-chain and incentive structures; who benefits from the trade (including gendered impacts); the role of middlemen; the limitations to markets; and how to balance the needs for management planning and oversight with the administrative demands on and capacities of small operators. Any such formalizing efforts should be accompanied by capacity building, credit and cooperative programs, and training in value-added sectors (all based on adequate market research).¹⁵⁴

Some governments, including those of Ghana and Liberia, have earmarked a share of timber revenue for special forest funds, in an effort to better use revenue from timber extraction to deliver services to local communities, to mitigate environmental damage at logging sites, and to fund forest management institutions. Others have done the same with oil and gas revenues (Chad¹⁵⁵ and Ghana) and diamonds (Sierra Leone). Forest funds can provide long-term management that helps address the time horizons associated with forest reform and the upfront capital investments required for sustainability, as well as addressing equity concerns. The key elements of a successful forest fund are that it covers its operating expenses, provides stable funds, is accountable and transparent, encourages local participation, and ensures environmental sustainability.¹⁵⁶

But where such earmarking is intended to circumvent an opaque and unaccountable general budget process, does it make sense to hive off a separate fund that is also likely (without safeguards and political will) to be worse? This is especially problematic when the state becomes more fragile, as seen in Indonesia's Reforestation Fund. An independent audit commissioned by the World Bank found that it had lost some \$5 billion from 1994 to 1997, mainly through subsidies and interest-free loans to well-connected companies. Only a small amount of reforestation was actually carried out.¹⁵⁷

Even in Ghana – not a postconflict state and regarded as having relatively good state capacity – the Forest Plantation Development Fund had problems. It was established in 2000 to provide finance for reforestation by encouraging private and public agencies to become more involved in setting up and managing forest plantations. But because of high transaction costs of loan application and corruption by chiefs and government officials, only about 2 percent of intended project beneficiaries, many of them the wealthiest farmers, obtained loans.¹⁵⁸

Unclear land tenure

Population displacement and the legacy of using land and forests for patronage create many land and resource disputes. Tenure is likely to be even more complicated after conflict as the displaced return to find squatters and other usurpers on their lands. These disputes are highly charged because they figure centrally in urgently needed livelihoods and local idioms of rootedness and justice. They frequently end in violence, especially if the occupants have made investments they wish to protect. To complicate matters, even if records were properly processed, spoilers often loot registry offices during conflict to create land-ownership uncertainty.

If the war is over, disputes over land distribution and the bitterness over competing claims can fester for decades, even creating conflict along ethnic, religious, or political lines.

Violence often breaks out in forested regions far from capitals and state control, populated by ethnic minorities whose forestry rights are often tenuously recognized in law, if at all. This weak recognition can often be a source of grievance that fuels violence as industrial logging concessions – revenues from which are sometimes used to fund conflict – are established on land that minorities claim as theirs. Land-tenure reform requires regular consultation among stakeholders that cannot be rushed, otherwise it risks creating misunderstandings, instability, or being co-opted by the elite. The donor community should therefore pay careful attention to developing strong institutions for adjudicating ownership and mediating disputes.

Even forest companies dispute claims to the logging rights in particular areas. Forest concessions constitute a key source of government revenue through the collection of taxes and fees, and in theory, concession holders are obligated by the terms of their concessions to provide social benefits to communities near their licensed forest areas. Concessions also contain regulations restricting overharvesting and other destructive practices, and to maximize sustainable yields.

But use of concessions for patronage and for funding conflict has undermined these goals. Further, overlapping claims stemming from this arbitrary licensing often make it impossible to determine who has the legal right to logging, after conflict. For this reason a forest concession review of companies not complying with requirements when the concessions were issued is essential to revitalize the sector – through the robust rule of law rather than patronage.

Anticorruption

Among resource-dependent economies (where resource rents account for more than 8 percent of GDP), democracies grow faster than autocracies, if restraint on political power exists. Where checks and balances are absent, democracies actually lag behind in growth.¹⁵⁹ But corruption control and oversight mechanisms are an even more important cross-cutting issue for many countries emerging from conflict, where states have long-established networks for patronage and personal gain, support criminal organizations, generate grievance, destroy forests, and have the revenue to finance conflict.

As an early measure, forestry (and indeed all resource sectors in countries where these have played a role in conflict) should be more explicitly incorporated into anticorruption frameworks, for example the World Bank's Governance and Anticorruption strategy.¹⁶⁰ The international community engaged in peace negotiations should press for the consideration of accountability and sound management to be explicitly included in agreements that allow for power sharing of resource ministries among warring parties. Safeguards would include measures for fiscal accountability, transparent concession allocation, and independent monitoring to prevent resources from being used as war booty.¹⁶¹

However, the persistently thorny problem of anticorruption efforts is the dearth of political will to establish anticorruption mechanisms that undercut the economic interests of the powerful, who may act as spoilers

of the peace if they view it as against their interests. Momentum and constituencies for change can initially be more effectively built outside the state through capacity building with civil society, community civic education, and mechanisms for public participation and transparency. But expecting the least empowered to conduct oversight of the most empowered requires safeguards and whistleblower protection, including support from international diplomatic corps, UN missions, and donors, to avoid retaliation and intimidation.

Sound anticorruption management and oversight are impossible without good data and timely, accurate, and transparent reporting. Yet a review of UNEP experience in postconflict countries found that “monitoring, data collection, reporting, and information sharing are themselves casualties of war.”¹⁶² This can be from loss of staff and resources due to flight, intimidation, and direct attacks and looting, from insecurity that makes field monitoring impossible, redirection of funding to other areas, as well as from the general disruption of state institutions already laboring under poor capacity before the conflict.

Improving capacity for data collection and reporting are not minor technical issues but essential pillars of forest management and prevention of a return to conflict financing. One critical aspect is implementing a chain-of-custody system for timber and timber revenues. Timber sectors, particularly in countries emerging from conflict and perceived to be risky investments, are often characterized by cost cutting by companies expecting high returns from their high-risk investments. Cost cutting often produces temptation for corruption to allow overharvesting and avoid costly requirements for environmental management and community payments. This temptation is fostered in part by a simple lack of transparency and accountability regarding tax revenue – shortcomings that the chain-of-custody and revenue transparency mechanisms are designed to overcome.

A chain-of-custody system can allow for the traceability of forest products from their origin in the forest to the point of sale and/or export and verify their legality. The chain's authority is the sole issuer of export permits and provides invoicing and monitoring of tax payments to ensure all payments are current before it grants any export permit. Coupled with a forest-revenue reporting system similar to the Extractive Industries Transparency Initiative, chain-of-custody and public-revenue reporting can serve a vital role in combating illegally sourced logs and financial mismanagement, as well as in bolstering public oversight. These measures can therefore strengthen accountability overall, and thereby reduce poverty and ameliorate the grievances and lack of social contract that can lead to violent conflict. Although the Extractive Industries Transparency Initiative is designed to provide transparency for revenues from the oil, gas, and mining sectors, there is no reason in principle that forestry could not have a similar scheme. Indeed, Liberia has included forestry as well, a useful pilot for similar initiatives.¹⁶³

After conflict, governments should be careful to manage the expectations of the private sector in sectors that contributed to the war. The private sector has a role in reconstruction and reform, but with the clear message from the government that there will be no return to business as usual. Early adoption of chain-of-custody and revenue-transparency mechanisms constitute one means of sending this message; another is an early forest concession review and the start of a competitive allocation system. If the government takes these steps in a principled manner, it can demonstrate its commitment to reform, transparency, oversight,

accountability, and removal of conflicts of interest. But it must be careful to ensure that others do not regard the concession review as an opportunity for capricious punishment. It should therefore establish the review criteria before assessing companies and include international representatives on the review panel.¹⁶⁴

Although vetting the armed services and police forces forms a central part of security reform after conflict, it is not practiced in natural resource sectors. Clear vetting procedures for those bidding on concessions are needed. They would, for example, bar those who are credibly alleged to have taken part in the conflict or other criminal behavior, or who are in arrears on their taxes.¹⁶⁵ Forest companies winning concessions should be prohibited from employing those facing similar allegations. Vetting is likely to face strong resistance from elites, and so should include transparency and oversight mechanisms, with an ombudsman to mediate disputes and build awareness among the public as well as in various government agencies (particularly the ministry of finance, which would benefit from better tax collection) to build momentum for success.

Incentives for “good” actors should also be explored. For example, chain-of-custody systems can track all timber from stump to sale, and can segregate illicit timber from the legal supply chain, thereby verifying legal operators and weeding out illegal operators that undercut production prices. Market incentives should be accompanied by education of the domestic private sector about current international market requirements for legality, especially in the United States under the Lacey Act and in the European Union under Voluntary Partnership Agreements, requiring certification of legality of wood imports. Such requirements have been powerful motivators for improving branding (and thereby market share) in many countries.

Conflict-sensitive enforcement

An emphasis on strengthening law enforcement and forest management – through raising capacity and increasing oversight – is important to send the clear message that the age of impunity has ended. At the same time, enforcement should have a conflict-sensitive focus. That is, enforcing forest regulations should not just be a crackdown on all offenders regardless of the severity of the violation, but a proportional analysis of who is in violation and why, with the focus on those who benefit the most and who are most responsible – not those holding the chainsaw.

Multiple cases, including Aceh, Colombia, and Ethiopia, show that recognizing local communities as rights holders and empowering them as forest monitors produce incentives for forest conservation. As noted, government and donor partners should devote careful attention to formalizing some aspects of the informal sector, without sacrificing long-term sustainability. Where formalization is inadvisable, alternative livelihood programs are critical to moving conflict-affected people out of illegal sectors.

Opportunities for cooperation

A combination of factors from many sectors inflicts high pressure on forests after conflict, as seen. There is an especially high demand for wood and revenue for reconstruction. But following capital flight due to the conflict and the persisting high risk for investment, there is often a lack of employment opportunity, precisely at a time when conflict-affected communities and ex-combatants alike need jobs. Farmland may be unavailable because of unexploded ordnance or land mines. These pressures place the easy and low-cost

extraction of forests ahead of important reforms and adequate management safeguards—an economically and politically attractive but short-sighted option.

Donor forestry experts should take advantage of the coordinating forums of donor agencies and of government and nongovernmental institutions (such as the Humanitarian Information Center) to raise awareness among donors and government agencies of the variety of impacts from other sectors on forest resources. In addition, a natural resource working group, bringing together a variety of sectors and stakeholders, might be a useful mechanism for communicating different players' priorities and expertise. Its possible areas of focus are support and coordination for:

- Monitoring and mitigating environmental impacts of displaced people and their return, carried out by the United Nations High Commissioner for Refugees.
- The United Nations Department of Peacekeeping Operations "second generation DDR" hotspot monitoring of ex-combatant involvement in extraction of forest products and forest plantation and the ex-combatant reintegration programs of the United Nations Development Programme.
- Wood-sourcing issues for reconstruction and donor projects.
- Exploring issues around sustainable and equitable possibilities for formalizing the informal logging sector.
- Land-tenure reform and institutional mechanisms for reviewing land conflicts.

Cooperation is especially important in border regions because they are vulnerable to cross-border traffic of commodities, labor, displaced people, capital, and weapons—as well as wildlife populations. A regional approach is therefore essential, covering weapons decommissioning and demobilization, timber trade agreements, law enforcement, and peace parks.

Peace parks can improve forest management through cross-border cooperation while creating jobs in building park infrastructure and monitoring (box 1.3). They can also provide a suitable "compromise" in competing land claims, such as the shared Condor-Kutuku conservation corridor along the disputed border between Ecuador and Peru. Moreover, markets for environmental services, especially carbon, are increasingly generating income for newly protected areas. Governments should consider conservation through peace parks, as a means of creating jobs and revenue.¹⁶⁶

BOX 1.3. REGIONAL MANAGEMENT FOR CONSERVATION AND CONTROL OF COMMODITY TRADE IN RWANDA

Rwanda is one of the most densely populated countries in Africa, making huge demands on natural resources damaged by waves of national and international conflict in the mid-1990s. The new government and affected communities needed revenue to recover.

In the late 1990s the government starting reforming the National Parks Management Authority and developing high-value mountain gorilla tourism. Today tourists pay \$500 for a visitor's permit, as well as a similar daily amount on luxury accommodation, meals, and transport. Some of these funds go to managing the park and developing local communities.

Given that the gorilla population spans the borders of the Democratic Republic of Congo and Uganda, the three countries in 2005 signed a cooperative management agreement for joint patrols, information exchange, and revenue sharing. The agreement represents an important step in transboundary management and demonstrates that environmental cooperation can be a useful mechanism for confidence and constituency building.

Rwanda, however, also provides an important lesson on the need for regional and cross-sectoral coordination in controlling the commodity trade. After widespread deforestation, in 2006 the government banned all charcoal production. Although the policy was fully implemented in that country, charcoal production simply moved to its neighbor, the Democratic Republic of Congo. This created a shadow economy of illegal charcoal smuggled into Rwanda, further increasing extractive pressures on Virunga National Park and damaging the gorilla habitat that generates tourism revenue for local communities in Rwanda.

Source: Ali 2007.

Lack of capacity or lack of political will?

A significant challenge for postconflict governments is the lack of capacity, with flight of expertise and financial capital during the war, and institutions eroded by lack of funds and corruption. Experience shows that essential services can be outsourced if capacity is still lacking, alongside traditional capacity-building measures.¹⁶⁷ Outsourcing should be accompanied by training and mentorship, a plan for transferring these services back to government, and the building of adequate oversight mechanisms.

However, recalling the distinction between states that are incapable (weak fragile states) and those that are unwilling (strong fragile states) to perform certain functions, it is also critical that donors should not mistake lack of political will for lack of capacity. Transitions are often incomplete in postconflict countries, with many of the old players still in positions of power, either officially or informally. Donors should analyze the various interests in different institutional functions, otherwise reforms "on paper" are unlikely to be implemented if conflicts of interest obstruct them.

CONCLUSIONS AND FUTURE RESEARCH NEEDS

The boom in “conflict resource” research in the last decade has focused on oil and diamonds, leaving the role of forests during and after conflict needing greater attention. Although detailed case studies are still relatively few, it is clear that where forests are accessible and there is some authority capable of asserting control, forests can exacerbate armed violence through conflict financing, the legacy of patronage, and the unaccountable behavior of logging companies and their security forces.

The impacts of conflict on forests vary. Forests may benefit from reduced use when insecurity halts extraction and conversion activities. But they can also suffer from conflict-driven overexploitation from combatants, civilians, and war profiteers alike.

Forests and their wildlife, as well as funding conflict, are important safety nets for civilians fleeing conflict or for those whose livelihoods have been disrupted by violence. They also suffer when management and law enforcement institutions are themselves destroyed by conflict.

Although forests experience mixed impacts during conflict, they most often suffer a heavy toll once the conflict is over, when a lack of cross-sectoral coordination increases forest access before the forest management and law enforcement institutions improve. Still, the economic, ecological, and cultural importance of forests makes them fertile ground for cooperation as a form of peacebuilding. The postconflict period is politically sensitive, and spoilers present a significant danger. Governments and donors can help isolate them by building momentum and broad constituencies for change through interagency and public participation in assessing needs and priorities.

Transparency and safeguards (to avoid conflicts of interest and other corruption) are fundamental, and at least temporarily some essential services can be outsourced. Forestry sector programs should ensure that the forest livelihoods of conflict-affected populations are not endangered by an industrial forestry sector that continues to serve as political patronage and a source of corruption.

Fragile states have complex and wide-ranging needs, which span multiple sectors and institutions. Such contexts require better integrated and coordinated support and reform across sectors and agencies. Cooperation not only improves the effectiveness of reform efforts, it also helps build government agencies' confidence and ownership of the reform agenda and awareness of the interconnections of sectors.

A clear set of postconflict priorities aims to make interventions better at taking advantage of opportunities without overwhelming the reform agenda. Donors should be prepared for commitments—of perhaps a decade—to ensure that short-term trade-offs do not undercut longer term, more difficult, goals that will help protect both forests and forest livelihoods.

The literature reviewed for this chapter reveals several gaps that should be addressed by future work. Field documentation reflects a serious dearth of the diversity of impacts to local livelihoods during and after conflict, and of government or donor interventions (such as timber sanctions, community forestry, and

formalization of forest enterprises). Given the mandate of donors for poverty reduction, it is especially important to understand the impacts of interventions on a nation's poorest people. Distinguishing between combat, shadow, and coping economies and who benefits from each should also be a key focus of future research, as should the impacts of support for activities such as logging, timber or agricultural plantations, and charcoal production on the livelihoods of women (especially female-headed households).

A broader array of carefully documented case studies is needed on forested areas that experience violent conflict, especially where subnational pockets of fragility in forested frontiers are an important dynamic in internal and transborder armed violence. Case studies where a key driving factor of conflict-related forest loss is conversion to agriculture are also needed (as in Colombia, Peru, and increasingly West Papua, Indonesia). These areas are underdocumented precisely because they continue to suffer from ongoing cycles of violence, and hence people are most vulnerable there. Work by (and protection for) local researchers should therefore be supported wherever possible.

A lack of reporting and data collection hampers quantitative analysis. The current focus is on civil and international war, national forest cover and trade, and national metrics of governance and development indicators. Databases using a wider range of metrics on violent conflict—such as ethnic, political, or electoral violence, criminal violence, and homicides—would enable a richer analysis of different forms of fragility than simply civil and international war. To the degree that these data could be collected at state or province level, it would facilitate a finer grained analysis that would illuminate subnational trends.

Likewise, data should be collected (by governments, with donor support) on the demographics and movements of people, developmental outcomes (such as human development indicators), and governance indexes, at state or province level (and eventually by district) rather than nationally. This finer scale will identify hotspots that warrant special focus and their correlation with poverty and state fragility indexes, and with forest cover and trade data, to begin to unravel possible causal factors.

In-depth analysis is needed on whether and how to formalize informal forestry sectors such as logging, fuelwood, and charcoal production. These sectors could provide revenue and employment, and help satisfy market demand (potentially undercutting illegal extraction). Careful analysis of the potential impacts of formalization and of institutions needed for good management is critical.

Finally, it has become an almost boilerplate recommendation for conflict-affected development actors to improve cross-sectoral coordination. Yet such coordination remains elusive. Serious analysis is needed here, too, to identify obstacles and incentives for coordination—whether among sectoral departments within the World Bank, among the Bank and other donors including UN agencies and field missions, or among donors and government agencies.

REFERENCES

- Adhikari, J.R., and B. Adhikari. 2010. "Political Conflicts and community Forestry: Understanding the Impact of the Decade Long Armed Conflicts on Environmental and Livelihood Security in Rural Nepal." Paper presented at the CAPRI Workshop on Collection Action, Property Rights, and Conflict in Natural Resource Management. June 28–July 1, 2010. Siem Reap, Cambodia.
- Ali, Salim. 2007. *Peace parks*. Boston, MA: Massachusetts Institute of Technology.
- Alvarez, M. D. 2003. "Forests in the time of violence: Conservation implications of the Colombian war." *Journal of Sustainable Forestry* 16 (3/4): 49–70.
- Ascher, William. 1999. *Why governments waste resources: policy failures in developing countries*. Baltimore, MD: Johns Hopkins University.
- Ashton, William. 2004. "The Kiev Connection." *The Irrawaddy* 12 (4), April 2004.
- Auty, Richard M. 1993. *Sustaining Development in Mineral Economies: The Resource Curse Thesis*. London: Routledge.
- Bajoria, Jayshree. 2009. "The Troubled Afghan–Pakistani Border." Council on Foreign Relations. March 20. Available at www.cfr.org/publication/14905/troubled_afghanpakistani_border.html
- Ballentine, Karen, and Heiko Nitzschke. 2003. "Beyond Greed and Grievance: Policy Lessons from Studies in the Political Economy of Armed Conflict." IPA Policy Report. International Peace Academy, New York.
- Bannon, I., and P. Collier, eds. 2003. *Natural Resources and Violent Conflict: Options and Actions*. Washington, DC: World Bank.
- Barr, C., A. Dermawan, H. Purnomo, and H. Komarudin. 2010. "Financial governance and Indonesia's Reforestation Fund during the Soeharto and post-Soeharto periods, 1989–2009: a political economic analysis of lessons for REDD+." Bogor: CIFOR (Center for International Forestry Research).
- Biggs, David. 2005. "Managing a rebel landscape: Conservation, pioneers and the revolutionary past in the U minh Forest Vietnam." *Environmental History* 10 (3): 448–76.
- Biswas, A., and H. Tortajada-Quiroz. 1996. "Environmental impacts of the Rwandan refugees on Zaire." *Ambio* 25 (6):403–8.
- Blackett, Hugh, Aiah Lebbie, and Emanuel Marfo. 2009. "An Analysis of Chainsaw Logging (Pit-Sawing) in the Natural Forests of Liberia: Towards A More Sustainable Production." Monrovia: Forestry Development Authority.
- Blom, A., and J. Yamindou. 2001. "The History of Armed Conflict and its Impact on Biodiversity in the Central African Republic." Washington, DC: Biodiversity Support Program.
- Blundell, Arthur G. 2008. "Scoping Study: On The Benefits Of Incorporating Forestry Into The Extractive Industries Transparency Initiative, With Specific Reference To Liberia." Monrovia: LEITI (Liberia Extractive Industries Transparency Initiative).
- . 2010. "The Financial Flows that Fuel War." Working Paper (June). Washington, DC: PROFOR.
- Boerma, Pauline. 2006. "Assessing Forest Cover Change in Eritrea: a Historical perspective." *Mountain Research and Development* 26 (1): 41–47.
- Bolongaita, Emil. 2005. "Controlling corruption in post-conflict countries." Kroc Institute Occasional Paper No. 26. Notre Dame, IN: Kroc Institute for International Peace Studies, University of Notre Dame. Available at <http://kroc.nd.edu/publications/publications2005.shtml>
- Boni, S. 2006. "Ghanaian Farmers' Lukewarm Reforestation: Environmental degradation, the timber option and ambiguous legislation." *Colloque international "Les frontières de la question foncière – At the frontier of land issues."* Montpellier.
- Brown, MacAlister, and Joseph Zasloff. 1998. *Cambodia Confounds the Peacemakers*. Ithaca, NY: Cornell University Press.
- Brunnschweiler, C.N., and E. H. Bulte. 2008. "Linking Natural Resources to Slow Growth and More Conflict." *Science* 320 (5876): 616–7.
- Buckingham, William A. Jr. 1982. *Operation Ranch Hand: The Air Force and Herbicides in Southeast Asia 1961–1971*. Washington, DC: Office of Air Force History, United States Air Force.

- Buhaug, Halvard, and Scott Gates. 2002. "The Geography of Civil War." *Journal of Peace Research* 39 (4, Special Issue on Civil War in Developing Countries, Jul., 2002): 417–33.
- Chaber, Anne-Lise, Sophie Allebone-Webb, Yves Lignereux, Andrew A. Cunningham, and J. Marcus Rowcliffe. 2010. "The scale of illegal meat importation from Africa to Europe via Paris." *Conservation Letters* 3 (5): 317–21.
- Collier, Paul. 2007. *The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It*. New York: Oxford University Press.
- Collier, Paul, and Anke Hoeffler. 1998. "On the Economic Causes of Civil War." *Oxford Economic Papers* 50 (4): 563–73.
- . 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56 (4): 563–95.
- Collier, Paul, Anke Hoeffler, L. Elliot, Havard Hegre, Marta Reynal-Querol, and Nicholas Sambanis. 2003. *Breaking the Conflict Trap Civil War and Development Policy*. Oxford, UK and Washington, DC: Oxford University Press and World Bank.
- Commission for Reception, Truth, and Reconciliation in East Timor. 2005. *Chega! Final Report*. Dili.
- Conca, K., and J. Wallace. 2009. "Environment and Peacebuilding in War-torn Societies: Lessons from the UN Environment Programme's Experience with Postconflict Assessment." *Global Governance* 15 (4):485–504.
- Cumming, D.H.M., C. Mackie, S. Magane, and R.D. Taylor. 1994. "Aerial census of large herbivores in the Gorongosa National Park and the Marromeu area of the Zambezi Delta in Mozambique: June, 1994." In *Direcção Nacional de Florestas e Fauna Bravia 1994. Gorongosa – Marromeu: management plan for integrated conservation and development, 1995-1999. Part 2*. Maputo: DNFFB.
- Debroux, L., T. Hart, D. Kaimowitz, A. Karsenty, and G. Topa, eds. 2007. *Forests in Post-Conflict Democratic Republic Of Congo: Analysis of a Priority Agenda*. Jakarta: CIFOR (Center for International Forestry Research).
- De Koning, Ruben, Doris Capistrano, Yurdi Yasmi, and Paolo Cerutti. 2008. *Forest-related Conflict: Impacts, Links, and Measures to Mitigate*. Washington, DC: Rights and Resources Initiative.
- De Merode, E., K. Homewood, and G. Cowlshaw. 2003. "Wild resources and livelihoods of poor households in DRC." ODI Wildlife Policy Briefings No.1. London: ODI (Overseas Development Institute).
- De Soysa, I. 2002. "Paradise is a Bazaar? Greed, Creed, and Governance in Civil War, 1989–99." *Journal of Peace Research* 39 (4): 395–416.
- DFID (Department for International Development). 2005. *Why we need to work more effectively in fragile states*. London: DFID, Poverty Reduction in Difficult Environments Team/Aid Effectiveness Team Policy Division.
- Di John, Jonathan. 2007. "Oil Abundance and Violent Political Conflict: A Critical Assessment." *Journal of Development Studies* 43 (6): 961–86.
- Elbadawi, Ibrahim, and Nicholas Sambanis. 2002. "How much war will we see? Estimating the prevalence of civil war." *Journal of Conflict Resolution* 46 (3): 307–34.
- Evans, Martin. 2002. "The political economy of war in the Casamance." Working Paper. School of Oriental and African Studies, London.
- . 2003. "Ni paix ni guerre: the political economy of low-level conflict in the Casamance." In *Power, livelihoods and conflict: case studies in political economy analysis for humanitarian action*, ed. S. Collinson. Humanitarian Policy Group Report 13: 37–52. London: Overseas Development Institute. Available at www.odi.org.uk/resources/hpg-publications/background-papers/2003/political-economy-conflict-casamance.pdf
- FAO (Food and Agriculture Organization of the United Nations). 2005. "Assessment of Timber Demand and Supply for Post-Tsunami Reconstruction in Indonesia." Rome: FAO. April 21.
- Farah, Douglas. 2010. "Transnational Crime, Social Networks and Forests: Using natural resources to finance conflicts and post-conflict violence" Working Paper (June). Washington, DC: PROFOR.
- Fearon, James. 2005. "Primary Commodities Exports and Civil War." *Journal of Conflict Resolution* 49 (4): 483–507.
- Fearon, James D., and David D. Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97 (1):75–90.

- Forest Watch Indonesia. 2002. *The State of the Forest: Indonesia*. Washington, DC: Global Forest Watch.
- Garrett, Nicholas. 2008. *Artisanal Cassiterite Mining and Trade in North Kivu: Implications for Poverty Reduction and Security*. Washington, DC: Communities and Small Scale Mining.
- Gelb, Alan. 1988. *Oil Windfalls: Blessing or Curse?* Washington, DC: World Bank.
- Glenny, Misha. 2008. *McMafia: A Journey Through the Global Criminal Underworld*. New York: Knopf.
- Global Witness. 1995. "Forests, Famine, and War - The Key to Cambodia's Future." London.
- . 2001 "Taylor-made: the Pivotal role of Liberia's Timber and Flags of Convenience in Regional Conflict." London.
- . 2002. "Deforestation without Limits: How the Cambodian Government Failed to Tackle the Untouchables." London.
- . 2005. "A Choice for China: Ending the destruction of Burma's frontier forests." Briefing Document. London.
- . 2010. "Global Witness investigation leads to UK arrest over carbon deal in Liberia." June 4. Available at www.globalwitness.org/media_library_detail.php/987/en/global_witness_investigation_leads_to_uk_arrest_ov
- Goodhand, Jonathan. 2003. "Enduring Disorder and Persistent Poverty. A Review of the Linkages between War and Chronic Poverty." *World Development* 31 (3): 629–46.
- . 2004. "Afghanistan in Central Asia." In *War Economies in a Regional Context*, eds. M. Pugh and N. Cooper: 45–89. Boulder, CO: Lynne Rienner.
- Government of Liberia. 2005. "Report of the Forest Concession Review Committee (FCR Report) – Phase III." May 31. Monrovia.
- Hanson, T., T.M. Brooks, G.A.B. Da Fonseca, M. Hoffmann, J.F. Lamoreux, G. Machlis, C.G. Mittermeier, R.A. Mittermeier, and J.D. Pilgrim. 2009. "Warfare in biodiversity hotspots." *Conservation Biology* 23 (3): 578–87.
- Harwell, Emily. 2003. *Without Remedy: Human Rights Abuse in Indonesia's Pulp & Paper Industry*. New York: Human Rights Watch.
- . 2010. *Forests, Ex-combatants, and Durable Security: Cross-Sectoral implications of post-conflict programming*. Working Paper (August). Washington, DC: PROFOR.
- Hatton, J., M. Couto, and J. Oglethorpe. 2001. "Biodiversity and War: A Case Study from Mozambique." Washington, DC: Biodiversity Support Program.
- Humphreys, Macarten. 2005. "Natural Resources, Conflict, and Conflict Resolution: Uncovering the Mechanisms." *Journal of Conflict Resolution* 49 (4): 508–37.
- IDA (International Development Association). 2007. *Operational Approaches and Financing in Fragile States*. Washington, DC: Operational Policy and Country Services (OPCS) and Resource Mobilization Department (FRM).
- International Crisis Group. 2003. "The Kivus: The Forgotten Crucible of the Congo Conflict." Brussels. January 24. Available at www.crisisgroup.org/en/regions/africa/central-africa/dr-congo/056-the-kivus-the-forgotten-crucible-of-the-congo-conflict.aspx
- . 2004a. "Myanmar: Aid to the Border Areas." Brussels. Available at www.crisisgroup.org/~media/files/asia/south-east-asia/burma-myanmar/082_myanmar_aid_to_the_border_areas.ashx
- . 2004b. "Colombia's Borders: The Weak Link." Brussels. Available at www.crisisgroup.org/en/publication-type/media-releases/2004/latam/colombias-borders-the-weak-link.aspx
- Internal Displacement Monitoring Center and the Norwegian Refugee Center. 2009. "Briefing Paper: Conflict Beyond Borders: Humanitarian Impact of the Colombian Conflict in Ecuador." October 10. Available at [www.internal-displacement.org/8025708F004CE90B/\(httpDocuments\)/DE451A41D5A9794AC125764F0042000C/\\$file/IDMC+NRC+border+briefing+paper.pdf](http://www.internal-displacement.org/8025708F004CE90B/(httpDocuments)/DE451A41D5A9794AC125764F0042000C/$file/IDMC+NRC+border+briefing+paper.pdf)
- Jackson, Stephen. 2002. "Making a Killing: Criminality & Coping in the Kivu War Economy." *Review of African Political Economy* 29 (93/94): 517–36.
- Jambiya, G., S.A.H. Milledge, and N. Mtango. 2007. "Nighttime Spinach: Conservation and livelihood implications of wild meat use in refugee situations in north western Tanzania." Dar Es Salaam: TRAFFIC.
- Kaimowitz, D. 1997. "Factors affecting low deforestation in the Bolivian Amazon." *Ambio* 26 (8): 536–40.

- . 2003. "Forest law enforcement and rural livelihoods." *International Forestry Review* 5 (3): 199–210.
- Kaimowitz, D., and A. Faune. 2003. "Contras and comandantes: Armed movements and forest conservation in Nicaragua's Bosawas biosphere reserve." In *War and Tropical Forests: Conservation in Areas of Armed Conflict*, ed. S.V. Price: 21–47. New York: Haworth.
- . 2001. "Overview of Armed Conflict and Biodiversity in Sub-Saharan Africa: Impacts, Mechanisms, and Responses." Washington, DC: Biodiversity Support Program.
- Karl, Terry Lynn. 1997. *The Paradox of Plenty: Oil Booms and Petro-states*. Berkeley, CA: University of California Press.
- Keen, David. 1998. *The Economic Functions of Violence in Civil Wars*. Adelphi Papers 320. London: Routledge.
- Kim, K.C. 1997. "Preserving Biodiversity in Korea's Demilitarized Zone." *Science* 278 (5336): 242–45.
- Lacey, Marc. 2002. "Mogadishu Journal: To Fuel the Mideast's Grills, Somalia Smolders." *New York Times*, July 25.
- Le Billon, P. 2000. "The Political Ecology of Transition in Cambodia 1989–1999: War, Peace and Forest Exploitation." *Development and Change* 31 (4): 785–805.
- . 2001. "The Political Ecology of War: Natural Resources and Armed Conflicts," *Political Geography* 20(5), 2001, 561–584.—. 2002. "Logging in Muddy Waters: The Politics of Forest Exploitation in Cambodia." *Critical Asian Studies* 34 (4): 563–86.
- Le Billon, P. and S. Springer. 2007. "Between War And Peace: Violence and Accommodation in the Cambodian Logging Sector" In *Extreme Conflict and Tropical Forests*, eds. Wil De Jong, Deanna Donovan, and Ken-ichi Abe:17–36. Dordrecht, the Netherlands: Springer.
- Lintner, B. 1999. *Burma in Revolt: Opium and Insurgency since 1948*. Chiang Mai, Thailand: Silkworms.
- Mahdavy, Hussein. 1970. "The Patterns and Problems of Economic Development in Rentier States: the Case of Iran." In *Studies of Economic History of the Middle East*, ed. M.A. Cook. London: Oxford University Press.
- Mascia, Michael, and Sharon Pailler. 2010. "Protected area downgrading, downsizing, and degazettement (PADDD) and its conservation implications." *Conservation Letters* (October 19): 1–12.
- Mata, J.F., and S. Ziája. 2009. *User's Guide on Measuring Fragility*. Bonn, Germany and Oslo: German Development Institute and UNDP Oslo Governance Centre.
- McGiviring, Jill. 2001. "Birds 'missing' after US bombing." BBC News, December 29. Available at http://news.bbc.co.uk/2/hi/south_asia/1719867.stm
- McNeely, Jeffrey A. 2007. "Addressing Extreme Conflicts Through Peace Parks." In *Extreme Conflict and Tropical Forests*, eds. Wil De Jong, Deanna Donovan and Ken-ichi Abe:159–172. Dordrecht, the Netherlands: Springer. pp159–172.
- MNRT (Ministry of Natural Resources and Tourism). 2005. "Burigi, Biharamulo and Kimisi Game Reserves Management Plan, Kagera Region." Kagera/Kigoma Game Reserves Rehabilitation Project. Wildlife Division, Ministry of Natural Resources and Tourism, United Republic of Tanzania.
- Nakamura, Goro. 2007 "Defoliation during the Vietnam War" In *Extreme Conflict and Tropical Forests*, eds. Wil de Jong, Deanna Donovan, and Ken Ichi-Abe: 149–58. Dordrecht, the Netherlands: Springer.
- Nietschmann, B. 1990. "Conservation by conflict in Nicaragua." *Natural History* 99: 42–8.
- OECD DAC (Organisation for Economic Co-operation and Development, Development Assistance Committee). 2005. "Principles for Good International Engagement in Fragile States." OECD-DAC Draft Paper. DCD (2005)8/Rev2, April 7.
- Orians, Gordon H., and E. W. Pfeiffer. 1970. "Ecological Effects of the War in Vietnam." *Science* 168 (3931): 546.
- Peters, Gretchen. 2009. *Seeds of Terror*. New York: Thomas Dunn Books.
- Pichet, Thomas, Marie Laval, and Antoine de La Rochefordière. 2009. "The opportunities and challenges of implementing a timber chain-of-custody system in post-conflict Liberia." XIII World Forestry Congress, Buenos Aires, Argentina, 18–23 October.
- Plumptre, Andrew J., Michel Masozera, and Amy Vedder. 2001. *The Impact of Civil War on the Conservation of Protected Areas in Rwanda*. Washington, DC: Biodiversity Support Program.

- Pugh, Michael, and Neil Cooper. 2004. *War Economies in a Regional Context. Challenges for Transformation*. Boulder, CO: Lynne Rienner.
- Rabinowitz, A. 2005. "Gold, Guns, and Greed: A Struggle for the World's Largest Tiger Reserve." *Wildlife Conservation* 108: 18–25.
- Reno, William. 1995. *Corruption and State Politics in Sierra Leone*. Cambridge, UK: Cambridge University Press.
- . 1999. *Warlord Politics and African States*. London: Lynne Rienner.
- . 2000. "Clandestine economies, violence and states in Africa." *Journal of International Affairs* 53 (2): 433–459.
- Ribot, J., A. Agarwal, and A. Larson 2006. "Recentralizing While Decentralizing: How National Governments Reappropriate Forest Resources." *World Development* 34 (11): 1864–86.
- Rights and Resources. 2010. *The End of the Hinterland: Forests, Conflict and Climate Change*. Washington, DC. Available at www.rightsandresources.org/documents/files/doc_1400.pdf
- Robinson, Amber. 2009. "Soldiers disrupt timber smuggling in Afghan province" United States Army, June 8. Available at www.usarmy.mil
- Rosenbaum, K., and J. Lindsay. 2001. "An overview of national forest funds: Current approaches and future opportunities." FAO Legal papers 15. FAO (Food and Agriculture Organization of the United Nations), Rome.
- Ross, Michael L. 1999. "The Political Economy of the Resource Curse." *World Politics* 51 (2): 297–322.
- . 2001. *Timber Booms and Institutional Breakdown in Southeast Asia*. Cambridge, UK: Cambridge University Press.
- . 2003. "Oil, Drugs and Diamonds: The Varying Role of Natural Resources in Civil War." In *The Political Economy of Armed Conflict: Beyond Greed and Grievance*, eds. Karen Ballentine and Jake Sherman: 47–70. Boulder, CO: Lynne Rienner.
- . 2004a. "What Do We Know about Natural Resources and Civil War?" *Journal of Peace Research* 41 (3): 337–56.
- . 2004b. "How Do Natural Resources Influence Civil War? Evidence from Thirteen Cases." *International Organization* 58 (Winter): 35–6.
- . 2006. "A Closer Look at Oil, Diamonds, and Civil War." *Annual Review of Political Science* 9 (1): 265–300.
- Rustad, S.C.A, J.K. Rød, W. Larsen, and N.P. Gelditsch. 2008. "Foliage and fighting: Forest resources and the onset, duration, and location of civil war." *Political Geography* 27 (7): 761–82.
- Saba, Daud S. 2001. "Afghanistan: Environmental degradation in a fragile ecological setting." *International Journal of Sustainable Development & World Ecology* 8 (4): 279–89.
- Sachs, Jeffrey D., and Andrew M. Warner. 1995. *Natural resource abundance and economic growth*. NBER Working Paper 5398. Cambridge, MA: National Bureau of Economic Research.
- Salazar, Milagros. 2009. "Peru: 'Police Are Throwing Bodies in the River,' Say Native Protesters." *InterPress Service*, June 8.
- Samander, Rahimullah. 2005. "Wildlife Exploitation Rampant: Rare species are being decimated as a result of ignorance and greed." ARR Issue 48, February 21. Institute for War and Peace Reporting. Available at <http://iwpr.net/report-news/wildlife-exploitation-rampant>
- Samfu Foundation. 2002. *Plunder: The Silent Destruction of Liberia's Rainforest*. Monrovia.
- Shambaugh, James, Judy Oglethorpe, and Rebecca Ham. 2001. *The Trampled Grass : mitigating the impacts of armed conflict on the environment*. Washington, DC: Biodiversity Support Program.
- Sherman, Jake. 2003. "Burma: Lessons from the Ceasefires" In *The Political Economy of Civil War: Beyond Greed and Grievance*, eds. Karen Ballentine and Jake Sherman. Boulder, CO: Lynn Rienner.
- Smith, Martin. 1999. *Burma : Insurgency and the Politics of Ethnicity*. London; Zed books.
- Smith, B. 2004. "Oil wealth and regime survival in the developing world 1960–99." *American Journal of Political Science* 48:232–234.
- Snyder, Richard, and Ravi Bhavnani. 2005. "Diamonds, Blood, and Taxes: A Revenue-Centered Framework for Explaining Political Order." *Journal of Conflict Resolution* 49 (4): 563–97.
- Stedman, Stephen. 2001. "Implementing Peace Agreements in Civil Wars: Lessons and

- Recommendations for Policymakers." International Peace Academy and Center for International Security and Cooperation, New York. Available at www.ipacademy.org/pdf
- Thomson, Jamie, and Ramzy Kanaan. 2004. *Conflict Timber: dimensions of the problem in Asia and Africa*. Washington, DC: USAID (United States Agency for International Development).
- UNEP (United Nations Environment Programme). 2003. *Afghanistan post-conflict environmental assessment*. Geneva.
- . 2005. *From Conflict to Peacebuilding: the Role of Natural Resources*. Geneva.
- . 2007. *Sudan: Post conflict environmental assessment*. Geneva.
- UNHCR (United Nations High Commissioner for Refugees). 2002. *Refugee operations and environmental management: A handbook of selected lessons learned from the field*. Geneva: Environment Unit, Engineering and Environmental Services Section.
- UN Security Council. 2001. "Report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of Congo." S/2001/357, April 12. New York.
- . 2003. "Report of the Panel of Experts pursuant to paragraph 25 of Security Council resolution 1478 (2003) concerning Liberia." S/2003/779, August 7. New York.
- . 2008. Report of the Panel of Experts on Liberia submitted pursuant to paragraph 5 (e) of Security Council resolution 1792 (2007) concerning Liberia." S/2008/371, June 12. New York.
- . 2009. "Update Report No. 1 for LRA affected areas." November 13. New York.
- U.S. Fund for Peace. 2009. "Failed States Index 2009." Washington, DC. Available at http://www.fundforpeace.org/web/index.php?option=com_content&task=view&id=391&Itemid=549
- Westing, Arthur H. 1971. "Ecological Effects of Military Defoliation on the Forests of South Vietnam." *Bioscience* 21 (17): 895
- Whiteman, Adrian. 2005. "FAO Discussion Note: Feasibility Of Introducing A Chainsaw Lumber Permit In Liberia." Rome: FAO (Food and Agriculture Organization of the United Nations).
- World Bank. 2000. *World Development Report 2000/2001: Attacking poverty*. Washington, DC.
- . 2002. "World Bank Group Work In Low-Income Countries Under Stress: A Task Force Report." Washington, DC.
- . 2005. "Fragile States—Good Practice In Country Assistance Strategies" Washington, DC: Operations Policy and Country Services.
- . 2007. "Strengthening the World Bank Group Engagement with Governance and Anticorruption: Report of the Executive Directors." Development Committee, Washington, DC.
- . 2009. *Roots for Good Forest Outcomes: An Analytical Framework for Governance Reforms*. Report 49572-GLB. Washington, DC: Agriculture and Rural Development Department.
- World Bank Inspection Panel. 2006. "Cambodia: Forest Concession Management and Control Pilot Project." Investigation Report 35556. World Bank, Washington, DC.
- . 2007. "Democratic Republic Of Congo: Transitional Support for Economic Recovery Grant and Emergency Economic and Social Reunification Support Project." Investigation Report 40746 – ZR. Washington DC.
- . 2010. *World Development Indicators 2010*. Washington, DC. Available at <http://data.worldbank.org/data-catalog/world-development-indicators>
- Wulan, Y.C., Y. Yasmi, C. Purba, and E. Wollenberg. 2004. "An analysis of forestry sector conflict in Indonesia 1997–2003." CIFOR Governance Brief 1. CIFOR (Center for International Forestry Research), Bogor.
- Wyler, Liana Sun. 2007. "Burma and transnational crime." October 25. Washington DC: Congressional Research Service. Available at www.policyarchive.org/handle/10207/bitstreams/19971.pdf
- Yayasan Hak. n.d. "The Politics of Agrarian disputes in East Timor: The Struggle for Land Rights and the Right to Self-Determination." Dili.
- Yusufzai, Ashfaq. 2009. "Smugglers Profit From Landlocked Afghanistan." *IPS*, August 4.

NOTES

- 1 World Bank 2005. See also World Bank 2000, 2002; IDA 2007.
- 2 Econometric analysis finds that these factors significantly increase the *risk* of conflict, but they do not predetermine fragility; likewise, fragility can exist in their absence.
- 3 Reno 1995; Karl 1997, 2004; Ascher 1999; Keen 1998; Collier and Hoeffler 1998, 2004; Elbadawi and Sambanis 2002; Fearon and Laitin 2003; Fearon 2005; De Soysa 2002; Buhaug and Gates 2002; Ross 1999, 2004a, 2004b; Humphreys 2005.
- 4 Rustad and others 2008; Humphreys 2005.
- 5 This assessment is based on various indexes and datasets, in particular the 2009 Failed States Index produced by the U.S. Fund for Peace (www.fundforpeace.org) and compared with the 2010 World Development Indicators for forest cover. A range of indicators have been tested for this association, including the International Country Risk Guide Indicators, and various indicators of transparency and corruption (see Mata and Ziaja 2009). All produce a similar result.
- 6 A huge amount of data have come from a review of forest concession contracts in Liberia and the Democratic Republic of Congo, a truth commission that investigated economic crime in the forest sector in Liberia, World Bank inspection panel reports for the Democratic Republic of Congo and Cambodia, and a joint United Nations–Liberian government Task Force on Rubber Plantations.
- 7 DFID 2005; OECD DAC 2005.
- 8 Some examples of different approaches include the Bank's Country Policy and Institutional Assessment (although assessments are provided only for IDA countries and concentrate primarily on investment policy and public spending management) and World Governance Indicators (aggregate scores combining external data from a variety of other indicator systems), the Fund for Peace's Fragile States Index and the Global Integrity Report (which both assess a broad variety of pressures from social and political factors), and the Transparency International's Corruption Perceptions Index. The Political Stability Task Force seeks to predict state failure by assessing outbreaks of various forms of conflict. The private sector also produces risk assessments that can be used to assess different areas of fragility, for example the International Country Risk Guide.
- 9 Reno (2000, pp. 434–5) defines a shadow state as a parallel set of commercially oriented networks that control access to markets and state functions, where decisions and actions are taken not necessarily based on written laws and procedures but on personal interest.
- 10 Common commodities are timber, charcoal, bushmeat, and tree crop plantations such as cocoa, rubber, and oil palm (as well as drugs, gems, metals, and oil).
- 11 Farah 2010 (of which an edited version appears in this volume).
- 12 Farah 2010; Reno 1999.
- 13 Including “neighborhood effects” of regional markets; flows of weapons, mercenaries, drugs, and other illegal commodities; political interference; cross-border ethnic ties; and destabilizing impacts of international markets or geopolitics.
- 14 Farah 2010; Glennly 2008.
- 15 Farah 2010.
- 16 See, for example, Harwell 2003, Wulan and others 2004, De Koning and others 2008.
- 17 Collier and others 2003; Collier and Hoeffler 2004.
- 18 This literature is broad but was spearheaded by Gelb 1988, Auty 1993, Sachs and Warner 1995, Karl 1997, and Ross 1999.
- 19 Collier and Hoeffler 1998.
- 20 Bannon and Collier 2003; Collier and others 2003.
- 21 De Soysa 2002; Fearon and Laitin 2003; Ross 2004a and b; Fearon 2005.
- 22 But even this result for oil, gas, and minerals remains controversial, with some authors offering contradictory findings, such as Smith 2004; Humphreys 2005; Ross 2006; Di John 2007.
- 23 For example, Ballentine and Nitzschke 2003.
- 24 Humphreys 2005.
- 25 Collier 2006.
- 26 Humphreys 2005.
- 27 Ross 2006; Brunnschweiler and Bulte 2008.
- 28 Auty 1993.
- 29 Sachs and Warner 1995.
- 30 De Koning and others 2008.
- 31 Ross 2003.
- 32 Le Billon 2001.
- 33 Blundell 2010 (of which an edited version appears in this volume); Harwell 2003.

- 34 Though of course drugs and wildlife parts can be more easily concealed. Recent research estimates that over 5 tonnes of bushmeat is smuggled through Paris airports each week (Chaber and others 2010).
- 35 Some studies have found that high-value resources may in fact have shortened wars, suggesting an incentive to reach an agreement to divide extraction rights (Humphreys 2005, Snyder and Bhavnani 2005 for oil and diamonds; and Sherman 2003 for narcotics and timber in Myanmar).
- 36 Rustad and others 2008. See also Stedman 2001, whose survey of peace agreements at that time found that “no peace agreement has been successfully implemented where there are valuable, easily marketable commodities such as gems or timber.” For case descriptions of Myanmar, see Lintner 1999 and Smith 1999; the Democratic Republic of Congo, the report of the UN Security Council 2001; Cambodia, Le Billon 2000 and Brown and Zasloff 1998; Liberia, Blundell 2010; Casamance, Senegal, Evans 2002.
- 37 Ross 2006, p. 265. See also Fearon 2005.
- 38 Rustad and others 2008.
- 39 Humphreys 2005.
- 40 For example, Mahdavy 1970, Karl 1997, Ross 1999, Fearon 2005, Snyder and Bhavnani 2005.
- 41 Ross 1999, 2001.
- 42 Timber that has contributed to the outbreak, escalation, or continuation of armed conflict.
- 43 Blundell 2010; Farah 2010.
- 44 See Blundell 2010 for cases from Liberia and elsewhere.
- 45 Robinson 2009; Yusufzai 2009;
- 46 Peters 2009; Gretchen Peters, pers. comm.. March 14, 2010.
- 47 Evans 2003.
- 48 Lacey 2002.
- 49 UN Security Council 2001.
- 50 Thomson and Kanaan 2004.
- 51 Sherman 2003.
- 52 Global Witness 2005.
- 53 Ashton 2004
- 54 Ross 2001; Blundell 2010.
- 55 Ross 2001; Blundell 2010.
- 56 Government of Liberia 2005, p. 35.
- 57 A director of the Mohammed Group of Companies and a close business associate of Taylor. He was alleged to have facilitated arms trafficking (Blundell 2010).
- 58 Government of Liberia 2005.
- 59 See, for example, Harwell 2003, Wulan and others 2004, De Koning and others 2008.
- 60 See, for example, Blundell 2010.
- 61 Salazar 2009.
- 62 Petén, Guatemala and Colombia (Farah 2010); Liberia (Farah 2010; Blundell 2010; Harwell 2010—of which an edited version appears in this volume); Cambodia (Blundell 2010; World Bank Inspection Panel 2006; Global Witness 1995, 2002, 2005); the Democratic Republic of Congo (Blundell 2010); Myanmar and Afghanistan (Blundell 2010); Casamance, Senegal (Evans 2003).
- 63 International Crisis Group 2003.
- 64 UN Security Council 2009.
- 65 Bajoria 2009.
- 66 Sherman 2003. See also Wyler 2007, International Crisis Group 2004a.
- 67 Internal Displacement Monitoring Center and the Norwegian Refugee Center 2009; International Crisis Group 2004b.
- 68 Farah 2010.
- 69 Liberia (Farah 2010; Blundell 2010); the Petén, Guatemala (Farah 2010); Colombia (Farah 2010); and Afghanistan (Blundell 2010).
- 70 Liberia (Blundell 2010); Colombia (Farah 2010); and the Petén, Guatemala (Farah 2010).
- 71 Buckingham 1982. See also Biggs 2005, Nakamura 2007.
- 72 Orians and Pfeiffer 1970; Westing 1971.
- 73 Alvarez 2003.
- 74 Adhikari and Adhikari 2010.
- 75 UNEP 2007.
- 76 Kalpers 2001.
- 77 Hatton and others 2001.
- 78 Shambaugh and others 2001; Conca and Wallace 2009; Hanson and others 2009.
- 79 Plumptre and others 2001.
- 80 Plumptre and others 2001; Hatton and others 2001.
- 81 Adhikari and Adhikari 2010.
- 82 Adhikari and Adhikari 2010.
- 83 UNHCR 2002.
- 84 Hunting is done with both local homemade shotguns and modern firearms, which are readily available because those in the camps include armed combatants as well as civilians. Biswas and Tortajada-Quiroz (2009) reported that “Close to one million people poured over the border into camps in and around Virunga [National Park]. The Mugunga camp lodged an estimated 50,000 soldiers with arms and ammunition.”
- 85 Jambiya and others 2007.
- 86 Jambiya and others 2007.

- 87 Shambaugh and others 2001, pp. 6-7.
- 88 Hatton and others 2001.
- 89 Cummings and others 1994, cited in Hatton and others 2001.
- 90 Blom and Yamindou 2001.
- 91 UNEP 2003.
- 92 McGiviring 2001
- 93 Saba 2001.
- 94 UNEP 2003; Saba 2001.
- 95 Samander 2005.
- 96 Alvarez 2003.
- 97 Kaimowitz 1997.
- 98 Farah 2010.
- 99 Alvarez 2003.
- 100 Shambaugh and others 2001; Conca and Wallace 2009.
- 101 Boerma 2006.
- 102 Forest Watch Indonesia 2002.
- 103 McNeeley 2007.
- 104 Hatton and others 2001.
- 105 Rabinowitz 2005.
- 106 Adhikari and Adhikari 2010.
- 107 Nietschmann 1990.
- 108 Kim 1997.
- 109 Harwell 2010; UNEP 2005; Ali 2007.
- 110 Jackson 2002; Pugh and Cooper 2004; Goodhand 2003.
- 111 This is not true for all forest products, though. In central Africa for example, while overall poor rural households depend most on the production and sale of bushmeat, the more affluent households in the village benefit most from the wild meat trade since hunting requires a particular skill and traditional hunters often have an elevated social status. In contrast, the poorest village households depend to a much higher degree on the collection, consumption, and sale of wild plants or fruits (De Merode and others 2003).
- 112 Kaimowitz 2003.
- 113 Kaimowitz 2003.
- 114 UN Security Council 2003.
- 115 UN Security Council 2003, p. 7.
- 116 Blundell 2010; Global Witness 2002.
- 117 UN Security Council 2003.
- 118 Samfu Foundation 2002; Global Witness 2001, p. 24.
- 119 UN Security Council 2003, para. 58.
- 120 UN Security Council 2003, p. 9.
- 121 Blackett and others 2009.
- 122 Jackson 2002; Goodhand 2004.
- 123 See, for example, Kaimowitz 2003.
- 124 Jackson 2002; Goodhand 2004.
- 125 Kaimowitz 2003.
- 126 FAO 2005.
- 127 Whiteman 2005.
- 128 Conca and Wallace 2009; Hanson and others 2009.
- 129 Hatton and others 2001.
- 130 Hatton and others 2001, p. 48.
- 131 Mascia and Pailler 2010.
- 132 Kalpers 2001.
- 133 This may increasingly be the case for speculators in the burgeoning voluntary forest carbon market. For example, United Kingdom-based Carbon Harvesting Corporation, which has no prior carbon market experience, acquired 400,000 hectares for REDD carbon credits, without following the legal requirements for tender. The chief executive officer was subsequently arrested on charges of bribing government officials (Global Witness 2010).
- 134 Blundell 2010.
- 135 Sherman 2003.
- 136 Global Witness 1995.
- 137 Le Billon and Springer 2007.
- 138 Debroux and others 2007.
- 139 Ribot and others 2006.
- 140 An Act to Establish the Community Rights Law of 2009 with Respect to Forest Lands, Art 4.1.b.
- 141 For example, <http://www.foresttransparency.info/report-card/updates/95/community-rights-law-published>
- 142 See Harwell 2010.
- 143 Harwell 2010.
- 144 Kaimowitz and Faune 2003.
- 145 World Bank Inspection Panel reports on Cambodia (2006) and the Democratic Republic of Congo (2007).
- 146 Kaimowitz 2003.
- 147 Hatton and others 2001.
- 148 Hatton and others 2001, p. 64.
- 149 Hatton and others 2001, p. 65.
- 150 Blundell 2010.
- 151 See, among others, PROFOR's governance work (<http://www.profor.info/profor/theme/governance>), and World Bank 2009, which expands on the building blocks of good governance and includes specific recognition of the stability of forest institutions and conflict management; the quality of forest administration; coherence of forest legislation; and economic efficiency, equity, and incentives. See also Governance of Forests Initiative (<http://www.wri.org/project/governance-of-forests-initiative>)

- and Access Initiative (<http://www.wri.org/project/access-initiative>) at the World Resources Institute, and the Forests and Governance Program at the Center for International Forestry Research.
- 152 Collier 2004.
- 153 See, for example, Blackett and others 2009.
- 154 For postconflict formalization programs for artisanal miners see, for example, Communities and Small Scale Mining, www.artisanalmining.org, Garrett 2008.
- 155 In Chad, the World Bank used its leverage to develop an oil fund earmarked for development; however, the fund failed because there was nothing to prevent Chadian politicians from renegeing on the agreement.
- 156 Rosenbaum and Lindsay 2001.
- 157 Barr and others (2010) report that between 1990 and 1999, only some 60 percent of land funded for reforestation was actually planted and less than half of these planted areas are "performing well" due to large losses from lack of maintenance, poor productivity, fires, and community disputes (pp. 15-18).
- 158 Boni 2006.
- 159 Collier 2007.
- 160 World Bank 2007.
- 161 Bolongaita 2005.
- 162 Conca and Wallace 2009, p. 493.
- 163 Blundell 2008.
- 164 Government of Liberia 2005.
- 165 The criteria might be based on those used by the UN Civilian Police's consultative process for vetting the national police and army.
- 166 Ali 2007.
- 167 See, for example, the outsourcing of chain of custody tracking to Liberfor and SGS in Liberia (Pichet and others 2009).

This chapter addresses the role of organized crime and commodity trafficking in facilitating armed conflict and producing cycles of protracted violence that persist in postconflict countries. It does so by looking at three case studies that demonstrate the different factors that drive conflicts and postconflict violence.

After presenting a theoretical framework—of positive and negative state influence, the vital role of the criminalized state and transnational criminal substate actors, and the role of nonstate actors—it examines the social networks required at different nodes of the commodity chain. Such networks rely first on traditional elites to act as “local fixers,” supplying the criminal state or nonstate armed actor with connections to the market and financial networks needed to extract and sell the commodity. These local fixers rely on “super fixers” to supply transport and war materiel, as well as to connect them to international “shadow facilitators” who can move weapons and commodities, launder money, and obtain the fraudulent international documents needed.

It then uses the three case studies to argue that transnational organized crime networks for trafficking commodities, specifically timber, can emerge in diverse circumstances of state strength—and state absence—that lead to cycles of violence. In Liberia a strong but criminalized state looted the marginalized, resource-rich rural areas, while in the timber-rich Petén region of northeastern Guatemala, and in forested areas of Colombia, criminal nonstate armed actors have operated in subnational territories mostly beyond state control.

Having captured some of the complexity and variation of three types of commodity conflict, the chapter concludes with a brief look at the common factors driving the conflicts. It also presents some considerations for national governments and global bodies.

THEORETICAL FRAMEWORK

The types of commodities that are easily looted include timber and diamonds. A more complex production and processing scheme is required for plantation crops such as oil palm and coca (the raw product for producing cocaine), but the high market demand for these products has made their criminalization lucrative. The absence of the positive capacity of the state to protect either its citizens or its natural resources is a central driving factor in the conflicts examined.

* Contact information: International Assessment and Strategy Center, 211 North Union St., Suite 100, Alexandria, VA 22314; doug@douglasfarah

Another factor is the legacy of unresolved historical conflicts that create not only unmet social needs but a highly trained labor pool of potential combatants with the military skills to make their services relatively lucrative. The potential for conflict in this case is further exacerbated by the social and political exclusion of largely indigenous populations that have historically been viewed as potential recruits for antigovernment forces.

Timber is of particular concern, partly because of the revenue it can raise and direct to criminal violence and armed conflict, and partly because of the widespread and long-term damage it—and the local livelihoods it generates—is suffering from.

Traditional categories for defining state performance developed in the wake of state failures at the end of the Cold War hinge on control of the use of violence. The premise is often that “Nation-states fail because they are convulsed by internal violence and can no longer deliver positive political goods to their inhabitants.”¹ These categories of states are often defined as:

- Strong—or able to control its territory and offer quality political goods to its people.
- Weak—or filled with social tensions and a limited state monopoly on the use of force.
- Failed—or in a state of conflict, with a predatory ruler and no state monopoly on the use of force.
- Collapsed—or with no functioning state institutions and a vacuum of authority.²

This broadly accepted conceptualization fails, however, to make a critical distinction: between nations where the state has little or no power in certain areas of its territory and no control over the use of force in these areas—and strong states where the government has in fact a virtual monopoly on power and the use of force but has changed into a predatory, criminal enterprise for the benefit of a small elite. In pursuit of this goal the criminal state deliberately neglects its core function of delivering basic services and providing security to its citizens. This analysis also largely ignores the links to the national, regional, and international markets that are necessary for these criminal enterprises to thrive, as will be discussed below.

Bayart and colleagues offer a more nuanced view in their discussion of the criminalization of the state in the African context, and propose six indicators to identify this type of state: the extension of the private use of violence to officeholders; a small coterie of people around the core of power that benefits from the extension of violence; the exploitation of official positions to engage in international commerce; the presence of international criminal networks; a cultural image that condones criminal activities; and an increasing importance of criminal activities for the country's economy.³

Internal violence as a predictor of state failure is also problematic when one looks at the state's inability to “deliver positive political goods to their inhabitants.”⁴ Some functioning criminal states are not convulsed by war or internal conflict, although the level of criminality is high. They are instead states looting resources because they have the capacity to do so.

In many other cases insurgencies have attracted followers under the guise of redressing real social grievances emerging from a predatory state that had failed to deliver prosperity to impoverished citizens. But those

stated causes were there from the start or quickly became secondary to the economic motivations, at least for the leadership of the insurgencies.

Considerable debate remains over the relationship between “lootable” commodities—those that are high in value but have low economic barriers to extraction—and the motivations of insurgencies. This greed versus grievance debate centers on motivating factors that may differ by social status and rank within the insurgency. Ballentine and Nitzschke among others argue that while looting (greed) is not the primary motivation for most insurgencies, access to lootable resources makes such wars “last longer, they are also messier and more difficult to resolve through diplomatic means.” They also argue that “Combatant groups that depend on lootable resources to finance their campaigns appear to be more prone to internal fragmentation, while the wars they fight are less centralized and territorially contained.”⁵ This fragmentation and territorial dispersion make postconflict resolution much more difficult because of the inherent command and control issues that arise in fragmented forces.

Paul Collier and others are moving away from the “grievance-based” concept of civil conflict (motivation based on a real or perceived grievance against the government) to the “feasibility hypothesis,” which Collier and colleagues sum up as “where rebellion is feasible, it will occur.”⁶ What is generally agreed is that when lootable commodities exist alongside the lack of a positive state presence as well as real political and social grievances, conflict is likely.⁷ As Jonathan Winer has correctly noted:

Illicit exploitation [by either state or nonstate actors] of a country’s natural resources is a common feature of jurisdictions experiencing serious failures of governance. Such cases typically involve both failures of legitimacy and capacity. The complex question of who has the right to control a country’s natural resources devolves into the simpler question of who has the capacity to exercise such control in practice. The power to gain access to natural resources, to strip them, to transport them out of the country and reap the financial benefits, become the major practical requirements for those seeking to exploit them. The financial benefits are the principal objective of such asset stripping.⁸

As the prices of automatic weapons have fallen in the international market, primarily from the former Soviet bloc, more and more small groups can put together the initial capital—often only a few tens of thousands of dollars—from “venture capitalists” to launch armed takeovers of commodities. Once taken over, usually in areas where there is no positive state presence, the commodity becomes the funding mechanism for the conflict to expand.

As Collier and colleagues further note, “Natural resources can increase the risk of rebellion because they constitute easy sources of rebel finance. This may both directly motivate rebellion and make rebellions that are motivated by other considerations more feasible. They can also sever the government from the need to tax citizens and hence indirectly produce a government that is not accountable, thereby increasing the grounds for grievance.”⁹

Weinstein states that where lootable commodities exist in a conflict “there is manifest scope for loot-seeking, [and] self-selection of recruits will gradually transform the rebel organization into one motivated by loot-seeking.” But if an insurgency is poor and has no access to such commodities, he argues, self-selection results in a different type of combatant.¹⁰ This can be either the state or a nonstate armed group.

Different commodities are more lootable than others. Alluvial diamonds, as much research has shown, are perhaps the easiest to loot because of the low cost of extraction, the high value of the commodity, and the ease of transporting the stones. Timber is also lootable, but is far bulkier and requires a larger investment for equipment, road construction, trucks, port facilities, and other infrastructure. It can be more easily tracked, and is more easily integrated into the “legal” world market than many other commodities.

It is important not to confuse capacity for territorial control and monopoly over the use of force with capacity to deliver “positive political goods.” The presence of the state is only beneficial if it performs the core functions of protection of the population and provision of basic services. If the state is present and strong, but is viewed as corrupt, incompetent, or predatory (or all three), its presence is not beneficial for creating either state capacity or legitimacy.

The promise of positive state presence can be fulfilled only with comprehensive development strategies that break the regional dynamic of isolation, poverty, and exclusion—in short, if they make the conflict *not* feasible by minimizing the social, economic, and political grievances identifiable as factors in legitimizing an armed uprising. At the same time, the state must maximize the general benefit derived from the commodity. This process is often blocked by the “criminal state,” as described below, and undoing the damage relies on institution building and creating government capacity to create and maintain a positive state presence.

Of particular importance to establishing such a presence are a functioning judiciary (to end impunity); public accountability (to make corruption less tolerated); legitimate law enforcement (to establish the ability to protect and secure citizens and their rights, usually identified as the first priority in areas of conflict or potential conflict); basic social services (such as access to primary health care and education); and access to economic opportunity (credit, land, markets, and roads to access those markets) to provide a reasonable expectation that one’s life can improve.

IMPORTANCE OF SOCIAL NETWORKS IN THE COMMODITY–ORGANIZED CRIME CHAIN

Whether the actor is a state-criminal syndicate or nonstate armed group, the primary goal is to control access to the “honey pot” or commodity that can bring substantial economic gain. This economic boon often assuages personal greed, but is also vital for acquiring weapons, ammunition, and other war materiel necessary to extend territorial control to capture more honey pots or to provide a safe haven from which to operate—often both. This in turn means that the actors must control territory, a key factor for understanding *where* these types of conflict are likely to break out and *how* they are likely to be sustained once started.

Particularly with commodities like timber (but also for diamonds and other natural resources), not only is the resource itself found in a limited geographic area, but certain infrastructure requirements must be in place in that physical space for the armed group to benefit from the goods it acquires. These include the physical infrastructure (access infrastructure such as roads or navigable rivers, extraction equipment such as cutting or mining equipment, export points such as sea ports or airports, and processing facilities such as wood mills or diamond-grading equipment). These also include a social infrastructure that can finance the extraction, recruit labor, move the commodity to the outside world, and exchange it for cash or goods the group needs, such as weapons, ammunition, boots, and vehicles.

These forms of infrastructure require diverse networks. As the *World Development Report (WDR) 2011* concept paper notes, “violence in today’s world is adaptive and resilient, assuming new forms in response to new opportunities.”¹¹ The same thing can often be said of the social networks engaged in linking the commodity trade to transnational criminal organizations.

Partly because of the adaptive capacity of these networks, one sees repeated cycles of violence where a conflict is supposed to end following a peace agreement, but simply morphs into a different conflict with many of the same actors. The flourishing of protection rackets and private armies leads to violent suppression of competitors, informants, insubordinates, witnesses, uncorrupted law enforcement or other government officials who pose a threat to criminal operations, and even innocent bystanders publicly murdered as a terrorizing tactic. When new elections are organized in the “postconflict” country, these criminal networks can also engage in illicit campaign financing that may ultimately fund election-related violence.

These networks are also crucial in other issues addressed in the *WDR* framework. Of particular note is the networks’ function in establishing links among local predatory groups. For example, as demonstrated below, Charles Taylor’s National Patriotic Front of Liberia (NPFL) and the Revolutionary United Front (RUF) in Sierra Leone in the early 1990s shared a support network through Libya¹² and Burkina Faso. In Guatemala’s Petén region, some loggers formed alliances with Mexican drug cartels.

In Colombia, former guerrillas and paramilitary members, often with connections to local elites and government officials, have been implicated in new groups which traffic cocaine and illegally seized land including in the area of the development of African palm plantations.

The networks also greatly facilitate the transnational traffic of commodities vital to the survival of the armed group, including timber, diamonds, cocaine, and other products. In Liberia these networks also facilitated the links necessary for transnational terrorist and criminal organizations to gain access to a commodity and to move that commodity for profit, as will be examined. The control of these networks is in many ways critical to territorial control and the resultant grip on power.

These social networks are surprisingly fungible *and* durable because they offer services critical to any incoming regime and because they are usually nonideological in their network building. Driven largely by economic imperatives, the groups have proven skillful at adapting to new political realities and exploiting them. They flourish even in times of violence because they offer services that are essential in moving the commodities to

market and ensuring in return that the regime (or nonstate actors) acquires the resources to enrich itself and maintain its government (or nonstate) hold on power in specific regions. These regions necessarily include the honey pot, since that pot is crucial for financing the ongoing conflict and for geographic control.¹³

Criminal states often lose their grip on power when they lose control of their networks or when the networks challenge the state for power. These networks are often made up of politically disempowered diaspora communities whose external contacts are useful to the regime.¹⁴ In Liberia many of the most powerful businessmen from the earlier regimes worked for Samuel Doe, despite his regime's execution of many of the traditional political leaders.¹⁵ From Doe, they migrated to the Taylor regime once it was clear that he was going to be the most powerful force in the post-civil war era. Taylor kept the businessmen's loyalty until, in their rational cost-benefit analysis, they concluded that a change in government would benefit their own interests.

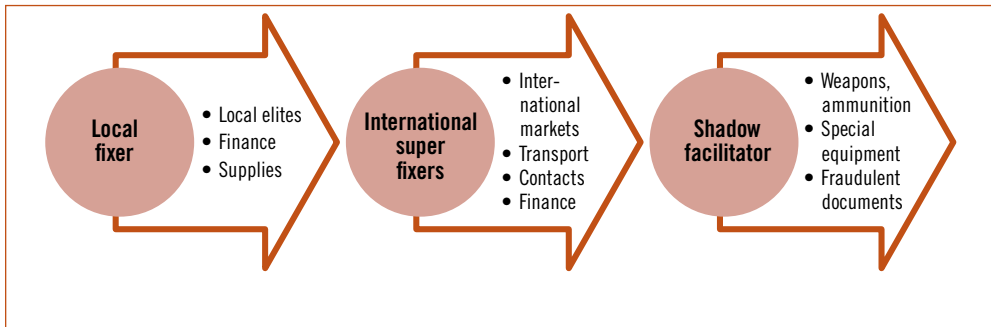
This mobility of the transnational networks is one of the reasons why postconflict expectations often are left unmet. Postconflict regimes frequently have little governance experience and seldom have the knowledge or experience to operate without the help of these networks, or simply find it easier to rely on them than to antagonize them. The U.S.-led occupation of Haiti in 1994 to restore President Jean-Bertrand Aristide provides a clear example. The occupying forces contracted almost exclusively with the families and networks that funded Aristide's initial ouster because they had the facilities that the United States needed. With the new regimes hamstrung by their dependence on the old network, the promised economic reforms never materialized.¹⁶

But local elites do not survive in isolation. Instead, they are—or become—part of a complex web of relationships that reach both backward (to the armed actor) and forward (to the international market). While local facilitators can make themselves indispensable to the new regime and know how things operate internally in the region during or after conflict, they often lack the expertise to supply the honey pot controller with the more specialized services required. This is particularly true of sophisticated equipment, aircraft and other transport means, and weapons and ammunition.

So, for example, while a local node of the network may know how to deliver rice or oil in adverse conditions or how to navigate the world of local militias, the same node may not know how to acquire a shipment of AK-47 assault rifles. Those who can provide those rifles from the international market and who are adept at breaking embargos or moving through the “gray market” arms bazaars want to sell the weapons but often do not know the lay of the local land and political structures.

It is in this niche that one finds a small group of super fixers (figure 2.1) who operate as intermediaries among these different groups at a handsome profit. These individuals—through family ties, successful smaller ventures in the past, personal charm, or a combination of these attributes—have ties to numerous elites across the region and to suppliers from the outside world. In the case of Liberia, many of these individuals were identified and can be traced. While this small group knows how to access local power brokers and how to make contacts in certain difficult markets, they may not themselves have access to the specialized markets of weapons, helicopters, and the necessary paperwork or banking facilities to make deals happen.

FIGURE 2.1. THE “FIXER” CHAIN

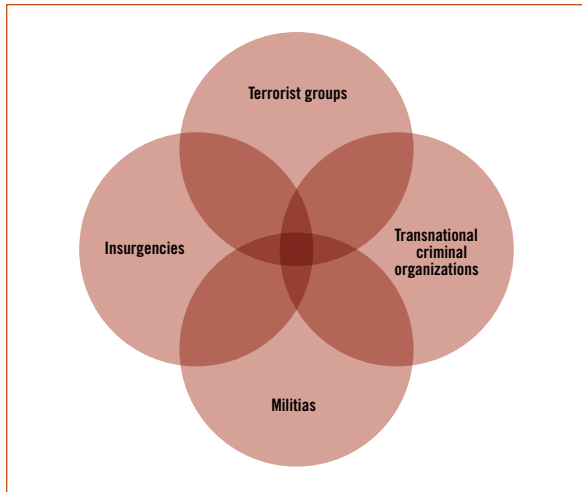


A separate but sometimes overlapping ring of actors known as shadow facilitators then comes into play,¹⁷ to acquire the specialized equipment and paperwork on the world's gray or black market, create or activate shell companies, and make the logistical arrangements to sell the commodity on the international market. The paperwork includes end-user certificates, which allow a government to appear to legally purchase weapons that may end up elsewhere; front companies to handle freight loading and delivery; offshore bank accounts to make the money untraceable; falsified flight routes to justify the time in the air; and air operations certificates showing that aircraft are certified airworthy.

Nor do many of these facilitators work exclusively in illegal activities. Of particular interest was Viktor Bout, a Russian weapons merchant now awaiting trial in the United States, whose air services were used by an array of governments and institutions even as they denounced his illicit activities. These included the U.S. government in Iraq, the U.K. government for aid work in Africa, and the UN for its peacekeepers and World Food Program operations in the Democratic Republic of Congo and elsewhere.¹⁸

The central aspect that binds these disparate organizations and networks, which together make up the bulk of nonstate armed actors, is the informal¹⁹ “pipeline” or series of overlapping, recombinant chains that these operations need to move products, money, weapons, personnel, and goods. These nonstate armed actors can be broadly grouped into terrorist groups, transnational criminal organizations, militias, and insurgencies (figure 2.2).

FIGURE 2.2. NONSTATE ARMED ACTORS



Each group has different operational characteristics.²⁰ Terrorist groups—global, regional, national, or subnational—are motivated (at least nominally) by religion, politics, or ethnic grievance. They rely on asymmetrical means of attacking a more powerful enemy and tend to be small. They also tend to couch their motives as a religious or political concept that is nonnegotiable.

Transnational criminal organizations are profit driven and dispersed across several nations and continents. While

often in conflict with the state, they also seek to embed themselves within its structures or take it over. They are often violent, but the more sophisticated groups value stability over conflict.

Militias tend to be localized armed groups that control “black hole” or “stateless” sectors, though their activities may cross national borders. They often want separation from the state—without seeking to overthrow it—to protect or benefit an ethnic or religious group, or a specific economic interest.

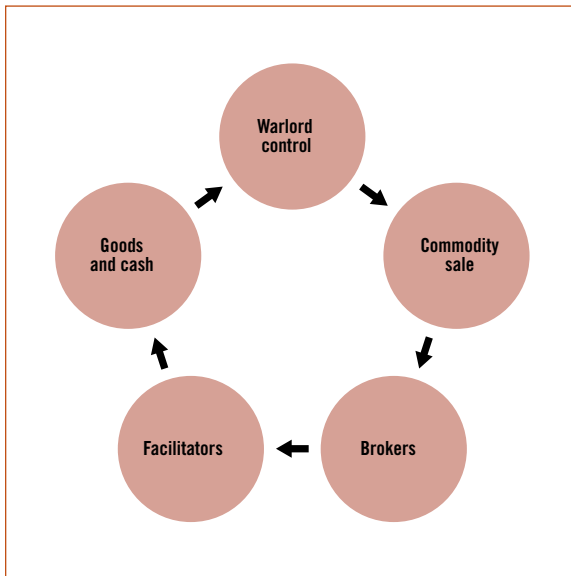
Insurgencies (or separatist movements) seek to take over the state or formally divide it. They have more clearly defined political objectives than militias in a given national or subnational area, but may direct their operations from outside it.²¹

The demarcation lines are of course blurred on the ground, with few groups falling neatly into one category or even two. For example, antigovernment insurgencies in Colombia (the Fuerzas Armadas Revolucionarias de Colombia or Revolutionary Armed Forces of Colombia—FARC) and Peru (Movimiento Revolucionario Túpac Amaru or Túpac Amaru Revolutionary Movement—MRTA) and pro-government militias in Colombia (Autodefensas Unidas de Colombia or United Self Defense Forces of Colombia—AUC) are also designated terrorist groups by the United States and other governments, and engage in parts of the transnational criminal structure. These hybrid structures change quickly and the pace has accelerated in the era of instant communication and the criminalization of religious or ideological groups.

As seen, the illicit trade of commodities has many complexities, from moving the product to international markets to delivering payments; the types of payments used to acquire the commodities, from cash to weapons and other goods the seller may need; and the role of shadow facilitators in connecting different networks of state and nonstate actors.

One can understand these complexities best by viewing them as a series of recombinant chains with links that can merge and decouple as necessary, rather than by looking at the purchase or exchange of commodities for cash or other goods as a series of individual transactions. The flow of goods is not linear but circular (figure 2.3), and it is not always limited to a single commodity. In Liberia for example, timber and diamonds flowed out through interrelated networks to different markets. When one buyer could no longer function, others stepped in. In the cocaine trade, the drugs flow from South America to markets in the United States and Europe, often through the same channels as for illicitly moving human beings, contraband, and drugs such as marijuana. As northbound interdiction has improved, the cartels have begun sending significant amounts of cocaine to West Africa for transshipment north to the growing markets in Central Europe.²²

FIGURE 2.3. CIRCULAR FLOW OF GOODS AND CASH



The flow of goods and cash for those goods is also circular, with the goods flowing into a pipeline where they can be commingled, and the cash (or merchandise purchased with the cash, such as weapons, helicopters, and ammunition) flows back. This complex pipeline is not only difficult to comprehend at ground level but is also in flux and easily rerouted when obstacles arise in any part.²³

While governments often view interdiction and disruption efforts separately to address national problems, the complicated reality shows that the

trafficking chains must be addressed at regional and multinational levels, and at different critical nodes. Since criminal structures' flexibility allows them to move fast to the weakest link in the enforcement chain, a focus on individual countries has repeatedly brought few results.

Similarly for establishing positive governance, the programs must at a minimum have a regional nature to build up the capacity of each state and limit the spillover effects from one nation to another. Otherwise, problems simply migrate around the region and become worse.

Given the usual economic imperative in these conflicts, the money is often vulnerable as it enters the formal financial structure. Attacking that vulnerability, however, requires concerted efforts and uniform laws across multiple jurisdictions, so that what is illegal in one country is also illegal among the neighbors.

In South America, while Colombia, Mexico, and other jurisdictions have tightened their anti-money-laundering laws and efforts, some observers argue that Ecuador has become more secretive and opaque.

Much of the cocaine profit that used to flow from the United States through Mexico to Colombia now flows from Mexico to Ecuador.²⁴ Because of its noncompliance with basic international norms, Ecuador in 2010 was, for the first time, rated one of the world's riskiest nations for financial transactions by the Financial Action Task Force.²⁵ The other nations named as among the riskiest were the Democratic People's Republic of Korea, the Islamic Republic of Iran, Ethiopia, and Angola.²⁶

CHARLES TAYLOR: TIMBER, DIAMONDS, AND WEAPONS

As a rebel, Charles Taylor gained control over forested territory in Liberia along the country's borders and used commodities to fund his insurgents, the NPFL, against the Liberian state (1989–1997). After he became president in 1997, and managing a remarkably efficient resource-extraction system, he continued to use revenue from commodity sales and bribes in exchange for concession allocations to fund his war against subsequent insurgencies against his rule (1997–2003).

From December 1989 to 1997 Taylor waged a brutal and destructive war against the Liberian government and other warlords.²⁷ In 1991 he helped to establish and train the RUF, a rebel group and proxy army in neighboring Sierra Leone. From the start he largely funded and pursued the wars through a desire to control the region's lucrative natural resources, including timber, diamonds, iron ore, and rubber, though his two main sources of income were timber and diamonds.

Taylor always relied on illegally extracting and selling commodities to fund his armed efforts, and viewed control of natural resources as a means of funding "Greater Liberia," a territory he saw encompassing the bauxite in neighboring Guinea and the diamond fields of neighboring Sierra Leone (map 2.1).

Within a year of launching the insurgency, Taylor controlled most of the vital economic regions of Liberia and was taking in millions of dollars to buy weapons and pay his troops.²⁸ In 1996 the U.S. government estimated that from 1990 to 1994 Taylor had "upwards of \$75 million a year passing through his hands," largely through selling timber and other commodities.²⁹

The wars helped destroy two of West Africa's more prosperous nations and left hundreds of thousands dead and millions displaced. Liberia's gross domestic product shrank by more than 80 percent from 1980 to 2003—falling per capita from \$600 a year to \$100—and unemployment rose to 80 percent.³⁰ Health and educational facilities were almost totally destroyed and the national infrastructure ruined. Many thousands of victims of violence—including amputation and violent rapes that leave the victim permanently maimed—experience social ostracism and have few livelihood opportunities. An entire generation of traumatized young people, many forced into combat as children, has been left largely unemployed, and often too brutalized to be employable without significant counseling and psychological help, which are rarely available.

MAP 2.1. LIBERIA



Building on the extensive relationships he forged during his years in the bush, as president, Taylor developed ties to organized criminal groups and terrorist organizations that allowed him to procure hundreds of tons of weapons from an extremely broad range of groups and individuals. He also greatly enriched himself. According to a 2005 study of Taylor’s finances, he generated about \$105 million a year in extrabudgetary

revenue to which he had direct access, some of which was moved through accounts opened in his name in New York banks and European financial institutions.³¹

These amounts contrast sharply with the official government budget, which, during Taylor's presidency, fluctuated between \$80 million and \$87 million a year. As many have noted, however, the government numbers were meaningless, reflecting neither real government revenue nor expenditure. Most years, virtually none of the money budgeted for infrastructure, health, education, or any other purpose was spent as designated.³²

Taylor was, in effect, not president of a country but was controlling what Robert Cooper has called the "pre-modern state," meaning territory where:

... chaos is the norm and war is a way of life. Insofar as there is a government, it operates in a way similar to an organized crime syndicate. The pre-modern state may be too weak even to secure its home territory, let alone pose a threat internationally, but it can provide a base for non-state actors who may represent a danger in the post-modern world ... notably drug, crime and terrorist syndicates.³³

Of that extrabudgetary income, Taylor directly controlled an estimated \$23 million a year that came from timber, an estimated one-third of total timber revenue.³⁴

This number was derived from estimates of Liberia's total timber revenue, best done by Global Witness in a series of studies. According to Global Witness figures, revenue from timber grew from about \$40 million in the early years of Taylor's presidency to \$152 million in 2002. The main engine driving the revenue growth was the increased activity of the Oriental Timber Corporation (OTC).³⁵

One of the reasons timber became so attractive was that most of the rest of the formal economy had been destroyed. Companies were willing to extract the timber, a veneer of legality was in place (a benefit of the criminal state), and it was highly lootable. The relative importance of timber increased greatly when the UN imposed diamond sanctions on neighboring Sierra Leone in 2000.³⁶ Taylor controlled the RUF in Sierra Leone, which moved its stones through his network, giving him great profits.

Social networks in the commodity trade

The extensive financial, military, and political networks that Taylor established before and during his time as president were impressive. His network for acquiring weapons ranged from the Balkans to Central America, from Bulgaria to the Islamic Republic of Iran. His inner circle of financial advisers, local fixers, international facilitators, sanction busters, and weapons purchasers included American, Belgian, Dutch, Israeli, Lebanese, Libyan, Russian, Senegalese, and South African citizens. His access to these international criminal networks greatly increased the resources to prolong the carnage his troops and his allies could inflict on the region.³⁷

Several individuals had overlapping roles in different illicit activities. These included local fixers Gus Kouwenhoven and Benoni Urey, super fixer Sanjivan Ruprah, and shadow facilitators Viktor Bout and Leonid Minin, operating along the lines in the model outlined above. All have been named by the Liberian Truth and

Reconciliation Commission as responsible for economic crimes.³⁸ They have also been named in various UN Panel of Experts reports and placed on the United Nations Security Council travel ban and asset forfeiture lists for being “threats to regional peace.”³⁹ The following pages outline some of their activities.

Gus Kouwenhoven, a Dutch national, operated a logging company known as TIMCO in land controlled by Taylor’s NPFL insurgents during Liberia’s civil war, from which Taylor’s forces profited directly. This put him in the category of local fixer and local elite.⁴⁰ When Taylor became president, Kouwenhoven, who also owned the Hotel Africa in Monrovia, was given a privileged position in Taylor’s financial circle.

On July 28, 1999, Kouwenhoven established the Liberian Forest Development Company in Monrovia, which was owned by two other companies, OTC and Royal Timber Corporation (RTC). While OTC’s owners were listed as three Indonesian–Chinese businessmen, RTC’s owners were listed as Kouwenhoven and Taylor.⁴¹ Robert Taylor, the president’s brother, as head of the Forest Development Authority in 1999 granted the company a logging concession of a little over 3 million acres, the largest concession by far in Liberia. OTC tripled Liberia’s timber exports from 1999 to 2000 and committed numerous violations by cutting undersize trees and by clear cutting.⁴²

Taylor did not hide his interest in OTC, publicly dubbing the company his “pepperbush,” a local expression meaning something that is dear to one’s heart and profitable.⁴³ Liberians joked that OTC stood for “Only Taylor Chops,” because of the fierceness with which he defended the timber company and attacked those who questioned its operations.

The OTC concession was illegal because it was not approved by the Liberian legislature as required by law. When the concession was called into question, Taylor simply had the legislature pass the Strategic Commodities Act of 2000, which granted him the sole power to give and maintain concessions over all the nation’s natural resources.⁴⁴

This is a central point in the relationships between local fixers and the government or insurgent warlord where they operate, whether state or nonstate: while providing that governing body with economic benefit, the fixer gets privileged access that enhances his own economic standing. It is a symbiotic relationship.

The way the OTC concession was granted shows an additional benefit of dealing with a criminalized state that is not subject to the rule of law or to normal checks and balances among the different branches of government. Operators received the concession and began to operate with no fear of legal sanction, even though the concession was against Liberian law. When it became politically necessary to legitimize it, Taylor simply wrote a new law—certain to be passed by a legislature he controlled—in such a way as to legalize virtually anything he did with any commodity on behalf of the Liberian state.

Various investigations by the UN, nongovernmental organizations, and the Truth and Reconciliation Commission have established that OTC and other logging companies both paid and fed Taylor’s militias and former combatants and helped Liberia evade UN sanctions. These militias, hired as security forces for logging

companies, were often commanded by notorious NPFL commanders and many of their members were charged with serious human rights abuses.⁴⁵

These cross-currents illustrate the costs for local businessmen in dealing with a criminal state. While reaping the benefits of such a system, they are also subject to its demands, which can change and become more excessive over time. There is no legal recourse.

Kouwenhoven during his subsequent trial in Holland described Taylor's escalating demands for OTC to pay more cash and provide other services.

I did have contact with Taylor about OTC matters. ... If he needed anything he would call me... Most of the time it had to do with financial requests. After we had concluded the OTC agreements and he was prepared to give concessions to OTC to make it a profitable company, we were asked to make an advance payment of \$5,000,000 for future taxes.... So he would make all kinds of requests. Apart from that he asked us to send a number of tractors to his farm, or he said that he wanted a road, that he needed electricity and he would ask me if I could advance the money. He also simply asked for payments.

He called for me and told me that it was understood that the Liberian government and OTC had an official tax relationship. The regular government budget was not sufficient and they would ask businessmen for financial aid. He would receive 50% of royalties I received from OTC.⁴⁶

Kouwenhoven later explained to a Dutch newspaper that:

The president is like the top God. If it turns out that he needs money at the end of the year to pay his civil servants he just calls at various businesses and asks them for an advance on next year's tax. And in that way you help pay the civil servants' salaries. This is not a 'Kouwenhoven system' – everyone is involved in it.⁴⁷

Despite this increase in demands for cash and services by Taylor, Kouwenhoven remained directly active in the weapons-for-commodities pipelines. While the Truth and Reconciliation Commission documented at least eight weapons shipments—six by ship and two by air—it is the air shipments that most clearly show how local fixers such as Kouwenhoven reached out to transnational super fixers such as Sanjivan Ruprah, who in turn tapped into the world of shadow facilitators (see figure 1).

Ruprah, a Kenyan of Indian descent, was one of the people documented as directly receiving payments for weapons from Borneo Jaya Pte Ltd., OTC's parent company.⁴⁸ Ruprah, who continues to operate, is a well-known super fixer in Sub-Saharan Africa and has surfaced repeatedly in criminal investigations across Africa.⁴⁹

Ruprah had worked with several private military companies and mining interests in the Democratic Republic of Congo, and was married to the sister of a leader of one of that country's main Rwandan-backed military

factions. Described as an “arms broker” in numerous UN reports, Ruprah had also directed the Kenyan office of Branch Energy, a company that in the early 1990s negotiated to obtain control of the diamond-mining rights of Sierra Leone. Branch Energy, through Ruprah, also introduced Executive Outcomes to the government of Sierra Leone, which used them to fight the RUF because its own forces were in such disarray. Executive Outcomes, made up largely of white, former special forces operatives from South Africa and Zimbabwe, pioneered the idea of hiring themselves out as mercenaries in exchange for extensive concessions in natural resources such as diamonds and timber.⁵⁰

Ruprah, by his own admission, met Taylor in the mid-1990s in Burkina Faso, before Taylor was president. He was seen more frequently in Monrovia from 1999, often staying at Kouwenhoven's Hotel Africa, where Taylor housed his more privileged guests. Recognizing how valuable his services were (or could be), Taylor issued Ruprah a diplomatic passport in 1999 under the name of Samir M. Nasr. He also gave him the title of Deputy Commissioner of Maritime Affairs, putting him nominally under the authority of Benoni Urey, who was the commissioner. Urey is an Israeli-Liberian who had worked closely with the Doe regime before its collapse and moved his loyalty to Taylor. (He also moved his knowledge of how to run the lucrative Liberian shipping registry to a new registry, the Liberian International Shipping and Corporate Registry, or LISCR).⁵¹

Headquartered in Vienna, Virginia in the United States, LISCR, after numerous investigations by U.S. officials, was never sanctioned. It provided \$18 million–\$22 million a year to the Taylor regime, and funds from LISCR were directly used to purchase combat helicopters for Taylor. On June 21, 2000, at the written request of Urey, LISCR sent \$525,000 via Standard Chartered Bank to San Air General Trading in Sharjah, United Arab Emirates. (San Air was Bout's main holding company.) Two weeks later another \$400,000 flowed through the same channels. LISCR was officially reprimanded by the UN Panel of Experts for not exercising due diligence in its disbursements.⁵²

Through his business dealings in the Democratic Republic of Congo, Ruprah had made a connection that put him in touch with the next circle—the shadow facilitators. His contact was Viktor Bout, one of the world's premier gray market weapons merchants. Dubbed the “Merchant of Death” by a senior British official following the discovery that Bout was arming multiple sides of several conflicts in Africa, Bout had made his mark by building an unrivaled air fleet that could deliver not only huge amounts of weapons but also sophisticated weapons systems and combat helicopters to armed groups. From the mid-1990s until his arrest in Thailand in 2008, Bout, a former Soviet intelligence officer, armed groups in Africa, Afghanistan, Colombia, and elsewhere.⁵³

Ruprah introduced Bout into Taylor's inner circle, a move that fundamentally altered both the supply of weapons to Liberia and to the RUF in Sierra Leone. One of the favors Ruprah and Taylor offered Bout was the chance to register several dozen of his rogue aircraft in Liberia.

Ruprah had taken advantage of operating in a criminal state and used his access to Taylor to be named the Liberian government's Global Civil Aviation Agent Worldwide to further Bout's goals. This position gave Ruprah access to the aircraft and possible control of it.⁵⁴ “I was asked by an associate of Viktor's to get involved in the

aviation registry of Liberia as both Viktor and him wanted to restructure the same and they felt there could be financial gain from the same," he has stated.⁵⁵

Bout was seeking to use the Liberian registry to hide his aircraft because the registry, in reality run from Kent, England, allowed aircraft owners to obtain online an internationally valid airworthiness certificate without having the aircraft inspected and without disclosing their name.⁵⁶

Within a matter of months mutually beneficial transactions were flowing. As the UN Panel of Experts reported, on August 26, 1999, OTC's parent company paid \$500,000 for weapons deliveries to Taylor. The money was paid to San Air, "through Sanjivan Ruprah."⁵⁷ In this circular pipeline, the timber flowed out and the cash flowed in, then the cash flowed out as the weapons flowed in.

Taylor, operating a criminal state, could offer more than just cash benefits to national and international facilitators. The local fixer could acquire premium concessions, control of a port, and official protection in a violent and uncertain context. He, in turn, could bring in a super fixer who, besides cash and official protection, could acquire a diplomatic passport, which allowed him to travel around the world without being searched or detained. The super fixer could then use his access to both Taylor and the international facilitator to bring a beneficial relationship to all involved. Finally, the international facilitator could enter a lucrative market and access an aircraft registry that allowed him to hide his aircraft from scrutiny for several years. Indeed, so vital was Bout to Taylor that he dubbed the arms merchant another of his pepper trees – untouchable. "Taylor would say that Bout was the root of his pepper tree, and without the root the tree dies," said one Taylor confidant.⁵⁸

A secondary set of pipelines

Pipelines or recombinant chains of goods and services seldom operate in isolation. Instead, those involved usually try to maximize their ability to make money and render their services attractive to those who can pay for them. It is not surprising therefore that Ruprah also reached out to other international facilitators besides Bout. One of those was Leonid Minin, a Ukrainian–Israeli arms merchant who set up the logging company Exotic Tropical and Timber Enterprises in Liberia while flying multiple shipments of weapons for the Taylor government, beginning in 1998.

He offered his private airplane, a BAC 111, to Taylor for use as a presidential jet. The UN Panel of Experts documented numerous Minin flights with weapons, often ferrying them from nearby Burkina Faso to Liberia.⁵⁹

Minin was arrested in Italy on August 5, 2000, after he refused to pay several call girls who had visited his hotel room. When arrested he had a \$1,500-a-day cocaine habit, \$3 million in unexplained deposits in his bank account, and diamonds worth about \$500,000. In a clear indication of his super fixer status, in his briefcase he was carrying an end-user certificate from Côte d'Ivoire for 113 tons of weapons and passports from Bolivia, Germany, the Russian Federation, and the former Soviet Union, all with different names. The Italian court eventually ruled that, because the weapons were not transiting Italy, it had no jurisdiction.

While Minin carried out some of his business with Ruprah, he soon developed another tie with the local elite. He became friends with Charles “Chuckie” Taylor, the president’s son and commander of the feared Anti-Terrorist Unit.⁶⁰ Chuckie Taylor, in exchange for expense-paid trips to his mother’s home in Trinidad and Tobago and for other perks, was working to get a joint contract with Minin from the president to be the sole importers of crude oil by-products into Liberia. In a fax to Minin, he claimed that the profits from the business would be about \$3 million a month, but Minin was arrested before the deal could be agreed to.⁶¹

The Lebanese diaspora and the diamond pipelines

One of the fundamental realities of Taylor’s Liberia was the constant need for cash to pay for items that were bought outside normal state procurement channels with extrabudgetary funds. (Cash was necessary to keep these items secret, since most purchases violated the UN-mandated arms embargo.) Given the absence of ready cash, Taylor was often forced to pay for goods and services with the goods he did have access to.

Taylor regularly relied on diamonds, as well as timber. This meant dealing with the Lebanese diaspora that had long dominated the diamond trade in the region. In addition members of the diaspora were active in timber, oil and rice imports, and other economically vital activities.⁶² In the timber trade, numerous investigations identified the brothers Abbas, Hussein, and Nasser Fawas as running logging companies that also imported arms for Taylor through the port of Harper. Among the companies were Maryland Wood Processing Industries (MWPI) and United Logging Company (ULC). Chuckie Taylor was the chairman of ULC.⁶³ MWPI guards were alleged to have committed serious human rights abuses, including looting local communities on both sides of the Côte d’Ivoire–Liberia border and massacring a Liberian community for attempting to prevent such attacks on an ethnically related village in Côte d’Ivoire.⁶⁴

Like Kouwenhoven and Urey, members of the Lebanese diaspora had served previous regimes and simply continued to exercise their franchises under Taylor. The economic necessity of the operations they controlled made replacing them difficult and dangerous. As described previously, Taylor, as Doe before him, relied on the same essential economic groups partly, as William Reno states, because “they were so integrally connected to the exercise of violence.” These groups had been both privileged in their economic operations and cut out of the political power structure. This “selective access to rights to profits,” which Taylor could arbitrarily revoke if he felt like doing so, kept the franchise operators constantly beholden to Taylor.⁶⁵

The Lebanese family and clan structure in West Africa has endured in part because its members work hard to retain ties to their homeland and in part because, as outsiders to both the local indigenous cultures and the elite Liberian-American culture, they banded together for the creation of reliable business networks.

Lansana Gberie noted their role in one study of the Lebanese diaspora in West Africa:

The Lebanese in West Africa, even those born there, remained and continue to remain intensely aware of events in Lebanon ... in Lebanon they are referred to as ‘Africans’. Their loyalty, however, remains with the Middle East, and many have made regular contributions to factions in that region’s never-ending conflicts.⁶⁶

Beginning in the middle of the 20th century, Lebanese businessmen became the region's primary diamond buyers from the alluvial mining regions, largely because they were willing to run the risk of living in the bush and transporting their valuable cargo to diamond markets, primarily in Antwerp, Belgium. They also knew how to move in the world of trade and finance, skills that few Liberians had at the time. Most of the mining activity took place in Sierra Leone, but as the war there gained momentum the financial center of power for the trade shifted to Monrovia.

Taylor supported the insurgent RUF in Sierra Leone and the RUF takeover of the diamond mining areas that straddle the Sierra Leone–Liberia border. The RUF leadership, an insular group with very little formal education, was inexperienced in dealing with the world outside the bush. Instead it turned over the diamonds to Taylor and his representatives in exchange for war materiel. The diamonds' value bore no relation to the amount of aid Taylor furnished. For example, millions of dollars in diamonds might be delivered to Taylor or his middlemen, and in exchange the RUF would receive a shipment of boots and rifles worth a fraction of the diamonds sold.⁶⁷ The illicit diamond sales represented a separate, though sometimes overlapping, network of brokers and facilitators.

As with timber, the same basic pattern holds of local businessmen reaching out to super fixers and facilitators. The RUF in Sierra Leone, while not comparable with local elites, had direct control over the area of production of a valuable commodity but did not have the capacity to turn that commodity into the goods, services, or cash that they needed.

Taylor, acting as the sole gatekeeper one had to pass by to purchase Liberian and RUF diamonds, personally authorized different groups to buy diamonds from the RUF, either in Monrovia or with the purchaser going to the bush to pick up the diamonds from designated RUF commanders. The purchaser would then hand-carry the diamonds to Antwerp or elsewhere for sale. In return, traveling as special government guests and under special government protection to avoid any difficulties at customs or immigration, the buyer could return with cash or goods (or both). Purchasers often brought to the RUF—besides weapons—satellite telephones, trucks, motorcycles, medical equipment, and other combat necessities.⁶⁸

Multiple diamond pipelines operated simultaneously under Taylor's overall direction. Diamonds are attractive because, unlike timber, alluvial diamond mining requires relatively little investment or specialized equipment to be profitable. The stored value of a small amount, easily carried by a single individual, is high, and the diamonds are virtually undetectable as they are smuggled (unlike timber in both cases). They set off no alarms and dogs cannot sniff them. Finally, the diamond industry is notoriously secretive and relatively closed, so smuggled diamonds are seldom reported.

The rest of this section examines only one pipeline—controlled by the related Nassour and Osailly families—demonstrating the potential of these pipelines to overlap with terrorist networks. It also shows how readily one pipeline is replaced by another. A 2004 Belgian police dossier, presented in legal proceedings against Samih Osailly, demonstrates this. Osailly was a regional diamond fixer born in Sierra Leone and familiar with the Liberia/RUF diamond movements. He worked with a facilitator who had international

connections, his uncle, Aziz Nassour. Both Osailly and Nassour were at the heart of the regional Lebanese diaspora diamond network.

The dossier said, “before the Nassour and Osailly period, Minin was an important figure regarding weapons supplies to the regime of Charles Taylor. Minin was paid in rough diamonds. After the arrest of Minin in Italy in August 2000 it would appear that Nassour and Osailly took over Minin’s role.” The case file alleged that Nassour and Osailly coordinated the delivery of several large weapons shipments for Taylor through Banjul, Gambia, operating through a company called New Millennium, a company also used by Viktor Bout.⁶⁹

This diamond pipeline was most active from mid-2000 until its collapse in September 2001.⁷⁰ Its success stemmed from personal relationships among different actors. The main broker was Ibrahim Bah (also known as Ibrahim Balde, among other names), who had received religious training in Mauritania and military training in Libya, joined the *mujahedeen* in Afghanistan in the mid-1980s, then trained with Hezbollah in Lebanon. Through his training in Libya he met and befriended Taylor, and, when Taylor helped launch the RUF in 1991, Bah was given the rank of general and the command of a large contingent of fighters.⁷¹

Bah ran a small diamond business in Liberia with Taylor’s authorization and made occasional trips to Antwerp to sell them, but he was not a serious diamond dealer. Despite his wealth of experience, Bah is most correctly considered a local fixer, able to reach down to suppliers, but with little reach up to the international market.

When Bah was approached in late 2000 through intermediaries to arrange an exclusive deal with Taylor for purchasing RUF stones, he turned to Samih Osailly, who brought in his uncle. Aziz Nassour was one of the best-known and best-connected diamond merchants in Africa, having honed his skills as one of the chief money handlers for Mobutu Sese Seko in Zaire. He later claimed that he was illegally moving \$25 million a week in diamonds from Africa to Europe on behalf of Mobutu. When Mobutu was overthrown by Laurent Kabila, like the elites in Liberia he switched sides and continued to operate a large diamond concession in the newly renamed Democratic Republic of Congo.⁷² In the world of African blood diamonds, Nassour was one of the facilitators, with direct access—through companies he and his clan owned and controlled in Antwerp—to the world’s largest diamond bourse.

Once on the deal in Monrovia, Nassour moved the key people in his network there, including Osailly, and his most efficient couriers. One of those tasked with logistics was Allie Darwish, a U.S.–Lebanese citizen who was also part of the diaspora network. (The new clients were in fact al Qaeda operatives, something Nassour may not have known, but this was largely irrelevant to the operations of the pipeline, which did not discriminate among the origins of the products it helped move.)⁷³

To facilitate the movement of diamonds, Nassour, Bah, and one of the new clients met with Taylor to ensure they had the necessary protection, and paid an “advance tax” of \$500,000 in cash to seal the deal. Nassour then met with the RUF high command in Monrovia to promise them Toyota Land Cruisers, Yamaha 250cc dirt bikes, and more satellite telephones. Following the meeting, the RUF command sent the following fax to Taylor outlining the deal and explicitly stating the relationship among the different actors, from the RUF to Bah to Nassour to Taylor.

FIGURE 2.4. REPRODUCTION OF FAX FROM RUF COMMAND TO PRESIDENT TAYLOR

Sir, we write to inform you of our present dealings with Mr. Aziz Nassour, that was introduced to us by Gen. Abrahima Bah, upon your recommendation. Sir, we agree to sell all of our diamonds to Mr. Aziz Nassour through your offices. Sir, General Abrahima Bah will buy these and other items for the movement from the funds that will come from the sale of diamonds.

- 1. Drugs for our wounded soldiers and their families.*
- 2. Fuel and gasoline, engine oil and some new tyres for the operations of the movement.*
- 3. Military uniforms and boots for our high ranking officers.*
- 4. Some cash that will keep us moving until General Abrahima Bah come from Belgium (sic).*
- 5. One 4 x 4 truck.*

May the Almighty richly bless you. Thanks.⁷⁴

Day-to-day operations were run by Osailly, who went into the bush with the clients to collect the diamonds from the RUF and transport them back to Monrovia. Nassour's trusted couriers from the Democratic Republic of Congo then moved the diamonds to Antwerp, where Nassour spent most of his time. The diamonds flowed through ASA Diam, a company in Antwerp controlled by Nassour and owned by his cousin. No new companies were therefore opened to sell the diamonds, as that could have attracted the attention of authorities or other buyers.⁷⁵

The pipeline was ruptured on September 11, 2001. The final satellite telephone call from Nassour's office in Antwerp to Afghanistan was made on September 10, 2001. Subsequent Belgian police investigations into the activities of Nassour and Osailly found that ASA Diam's account in Artesia Bank had been inactive from 1997 until early 2000. From early 2000 until April 2001 the account turned over about \$70 million. While the company declared the diamond imports to be from the Democratic Republic of Congo, investigators found the stones had, in fact, been coming from Monrovia.⁷⁶

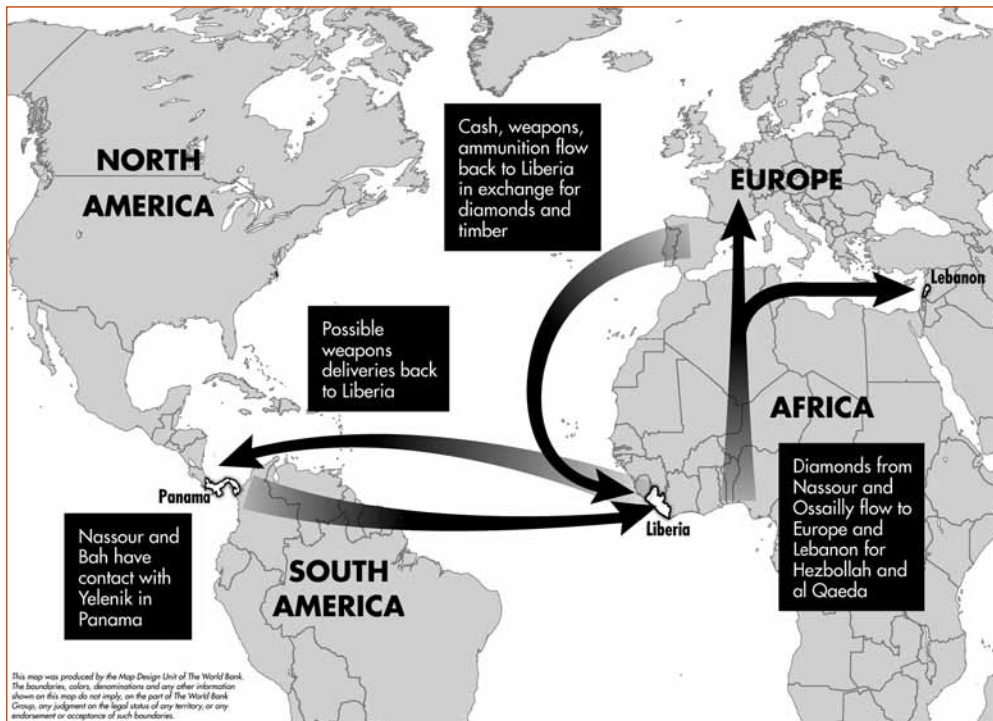
The links among the different actors in this case are important and far-reaching (map 2.2). Illegally mined diamonds by a murderous rebel group in the bush of Sierra Leone were sold to middlemen operating under state protection in Liberia. These middlemen brokered sales of the stones to an international terrorist organization, which sold them in the world market through a well-established ethnically based network of illicit operators.

In return Taylor received not only cash, but weapons. Bah, through Nassour, had embarked on a weapons-buying spree. In early 2001 Nassour began an effort to buy a large quantity of sophisticated weapons, including 20 SA-8 surface-to-air missiles, 200 rockets for BM-21 multiple rocket launchers, and thousands of Dragunov sniper rifles.

To procure the weapons, Nassour sought the help of Shimon Yelenik, a former Israeli military officer living in Panama. The weapons purchase was to be justified by an end-user certificate from Côte d'Ivoire. On January 2, 2001, Yelenik sent an email to a Russian contact in Guatemala discussing "an order that our friend in Africa need [sic]. They need it very urgent [sic]." The email asked for quotes on prices for the weapons "with and without an end-user certificate. Destination, Liberia." Osailly faxed the weapons list to Yelenik from Miami. The Russian merchant arranged for most of the weapons to be shipped from existing weapons stores in Nicaragua, and arranged for payment to be made to the Nicaraguan ministry of defense.⁷⁷

It is unclear whether the weapons were ultimately delivered to Liberia. Some of the weapons in this order in fact ended up in the hands of Colombian paramilitary groups.⁷⁸ But that such discussions could take place at all shows the measure of the links among different criminal groups and commodities.

MAP 2.2. THE NASSOUR-OSAILLY WEAPONS AND CASH PIPELINE



COCAINE AND LOGGING IN THE PETÉN

The Petén region of Guatemala has one of the most biologically diverse forests in the world and is known in the Guatemala context for the involvement of local communities in forest management. It is also one of the fastest-deforesting regions in Latin America as well as a transit zone for overlapping criminal structures (map 2.3). They often work together to traffic in illegal goods from South America to Mexico, Belize, and the United States. Among the primary products in the pipeline through the jungle region are cocaine, timber, and illegal migrants. In exchange the traffickers bring cash for salaries that are far above the average in the impoverished region—and sophisticated weapons.⁷⁹

MAP 2.3. GUATEMALA WITH THE PETÉN REGION



The pipeline's existence can be traced in part to Guatemala's brutal 35-year civil war, which ended in 1996 and which helped give rise to some of the current favorable conditions.⁸⁰ Among the legacies is a large cadre of former combatants from both sides who are highly trained and experienced but who have remained relatively unincorporated into civilian life. Another legacy is the easy and cheap availability of all types of weapons in Central America, left over from the overlapping civil wars in Guatemala, El Salvador, and Nicaragua, which were fought in the 1980s and 1990s.

This "talent pool" and these weapons have been tapped by transnational criminal organizations for security operations and by drug-trafficking organizations (DTOs) in the Petén and across Guatemala. Indeed in Guatemala, El Salvador, and elsewhere state control of national territory has been undermined in some areas as better armed and better trained DTOs from Mexico, allied with local groups, have expanded their reach.⁸¹

Another facet exacerbating Guatemala's crisis is its geography. To the west and north, its extensive and porous border with Mexico offers a low-cost and low-risk way of moving cocaine to a primary staging area for Mexican DTOs. To the east, its almost unprotected border with Belize—and onward access to the Caribbean—facilitates the commingling of illegal Guatemalan timber with legal Belizean timber.

The Petén in particular is vulnerable, given its long-standing abandonment by the state due to its distance from the capital, lack of easily exploitable natural resources, and use as a rearguard safe haven for guerrillas during the nation's recent civil war. The abandonment has been a constant source of friction between residents of the Petén and the government, and a source of social and political grievances. This abandonment could have its roots in the largely indigenous composition of the sparse local population and in the army's perception that the indigenous communities were natural allies of the guerrillas, and therefore targets for extermination. The Guatemalan Commission for Historical Clarification in 1999 found that 83 percent of civilian victims in the civil war belonged to Mayan indigenous groups.

The Army's perception of Mayan communities as natural allies of the guerrillas contributed to increasing and aggravating the human rights violations perpetrated against them, demonstrating an aggressive racist component of extreme cruelty that led to the extermination en masse, of defenseless Mayan communities purportedly linked to the guerrillas – including children, women and the elderly – through methods whose cruelty has outraged the moral conscience of the civilized world.⁸²

Unlike Taylor's Liberia, the Petén has long been beyond the effective control of either national or state governments. Rather than controlling the state or running a quasi-state apparatus as an insurgency, as Taylor did, the groups in the Petén are much more ad hoc and dispersed. While Taylor centralized the revenues from the exploitation of commodities by his relatively small group, the revenues in the Petén flow in a more defuse manner and are not for the interests of a state or quasi-state (criminal state) enterprise.

A regional state presence alone would not necessarily, however, have mitigated the illicit activities and conflict in the Petén. While government corruption is often cited as a factor in delegitimizing a state, few states have had the massive public problems that Guatemala has suffered in recent years.

Among recent cases is the arrest of former president Alfonso Portillo in January 2010 on charges of embezzlement and stealing millions of dollars from a children's charity.⁸³ The national police chief and the nation's drug czar were arrested in March 2010 on charges of drug trafficking, the latest in a string of arrests of senior police officials for drug corruption over some five years. In March 2007 three Salvadoran members of the Central American Parliament were kidnapped and burned to death in Guatemala by detectives linked to local drug gangs.⁸⁴

In a bleak acknowledgment that the Guatemalan state was incapable of investigating the most serious crimes, the government in 2007 agreed to setting up the International Commission Against Impunity in Guatemala, under UN auspices, to carry out the investigations.⁸⁵

This generalized weak state presence in Guatemala had few effects outside the Petén for many years because it was so sparsely inhabited and there was little to govern. Beginning in the 1970s and 1980s, however, the region absorbed a growing number of people displaced by the civil war and driven off their land by either government-supported paramilitary groups or by the Marxist guerrillas who used the region as a rearguard to escape military offensives.

By 1980 the first serious clear cutting of the vast region began, with illegal loggers paying a "tax" to the rebels to obtain access to mahogany and Spanish cedar trees.⁸⁶ At the time almost 50 percent of Guatemala's land mass was covered by forest. Today it is closer to 35 percent, with wood primarily used as cooking fuel. Only a small amount is legally exported.⁸⁷

Because of the almost complete lack of a positive state presence and the large population push into the region, there were no viable land titles and virtually no conservation. A first step was the Maya Biosphere Reserve, established in 1990 with 1.2 million hectares. It was designed to have multiple uses, allowing communities to make a living and protecting against clear cutting and deforestation. But while the reserve has slowed degradation driven by the land push and its parallel logging activities, it has not stopped it. The reserve itself has been logged extensively, in direct violation of the laws that set it up.

An estimated 40,000 hectares of land still fall to slash-and-burn agriculture each year. The population of the Petén region continues to grow by more than 8 percent a year. From 1964 to 2000 the population grew from some 25,000 people to more than 500,000,⁸⁸ and is likely close to a million now.

As the population grew and the drug trafficking and illegal logging mushroomed, the level of violence shot up. This is true in both the Petén and the country as a whole. According to Guatemalan police figures, which generally underestimate the total, the number of homicides in Guatemala more than doubled from 2,655 in 1999 to 5,885 in 2006, and the rate per 100,000 rose from 23.7 to 45.2. In 2007 the figures dipped slightly, but in 2008 rose again to 6,292, for a rate of 47.3 per 100,000.⁸⁹ This is among the top five homicide rates per 100,000 in the world. (The U.S. homicide rate was 5.4 and Germany's 1.9 in 2007.)

For the Petén the numbers are more difficult to obtain because statistics are not well recorded. According to World Bank figures, the homicide rate in the 13 major municipalities rose from an already high 69 per

100,000 in 2003 to 107 in 2008.⁹⁰ The figures are not entirely accurate because they are based on 100,000 inhabitants, and several of the municipalities in the dataset do not have that many people. Even so, the number is alarmingly high.

The rise of organized crime in the Petén region

The rise in population was combined with other factors that made the Petén an integral part of an emerging criminal pipeline that combined smaller, more local crimes (logging and human trafficking) with transnational criminal organizations involved in the international drug trade (cocaine).

The nexus of smuggling routes for timber, rapid deforestation, and the need to find new cocaine routes led to a lucrative new pipeline that had not existed on a large scale until the mid-1990s.

Without the earlier timber exploitation the region would not have proved as attractive to drug traffickers. In this case one can trace the emergence of greater levels of sophistication in the organized crime structures as they diversified into more lucrative products. One can also trace the consequences of one illicit activity leading to another that is both easier to transport and conceal. The value of cocaine traffic through the region, and the relative wealth it has brought to a few while strengthening criminal structures, reduces the chances that the state will be able to regain control of that territory, even in the long run and with a predominately positive presence.

Although the government has supported land titling in the last 10 years, including in the Petén region where titling was completed in 2006, this progress toward order and legality has been undermined by recent trends toward large land purchases by individuals who act as the de facto state.

While the concentration of land is not always illegal (although it is when it involves protected state lands), it can have far reaching consequences for farmers who lose their land, then migrate in search of jobs or move to national park land, cutting down trees to grow food for their families. One survey estimated that some 30 percent of farmers in southern Petén, or about 16,000 families in 250 communities, had sold small holdings totaling 156,500 acres to large landholders in 2008 and 2009.⁹¹ Farmers were approached by buyers making relatively high offers that reflect the overlapping circles of criminal activity that have pervaded the region, primarily the drug traffickers' desire to control the region as a cocaine way station.⁹²

In the initial phases of the settlement of the Petén in the 1980s and 1990s the primary illicit activity was cutting, milling, and selling high-value timber. Few statistics from the time are available, although at least two sawmills, under the protection of guerrilla forces, were operating from the early 1980s.⁹³ This activity spawned local timber brokers who could move the timber through Belize to the Caribbean or to Mexico, generally using logging roads where the state had no presence. It also led to large cattle ranches once the tropical rain forest had been cleared, because the soil in deforested land is unsuitable for sustainable agriculture.⁹⁴

By the late 1990s and into the first decade of this century, the trend of amassing large land holdings in the Petén accelerated. Mexican cocaine cartels, growing in strength and expanding their reach, were looking for

new routes to move their product to the United States. Because of the relative success of the U.S.-led sea-interdiction efforts, they shipped more cocaine by air. Given the limited range of the small aircraft the drug traffickers were flying, most of the aircraft had to refuel before reaching Mexico. This made the Petén, with its large, deforested ranches and no law enforcement, ideal.

By 2007 the U.S. Drug Enforcement Administration estimated that 70 percent of the cocaine moving from Colombia to the United States passed through Central America, with central Guatemala and the Petén at the heart of the new trafficking routes. Hundreds of airstrips had been laid down at ranches in the region.

Yuri Melini, a well-known environmentalist in the Petén who has survived several assassination attempts, told the *Los Angeles Times* that “narco cattle ranches” and “narco communities” have spread into ostensibly protected regions of the Petén, wreaking havoc on an environment of normally lush flora and fauna. The “farmers” level the mahogany and tropical cedar trees with power saws, and then set fire to the underbrush. Low-lying grasses quickly grow in the blackened soil, providing pasture for cattle and horses—and flat landing strips for overloaded small Cessna aircraft carrying cocaine.⁹⁵

In an email interview, Melini elaborated, saying that drug traffickers often use local communities as “shields” for their activities. “Using the pretext of land rights, they push people into protected natural habitats, they invade them, they usurp them, they denude them, but it is not for agricultural use or rural development. They use these people to destroy the forest, introduce cattle, and build airstrips for drug activities.”⁹⁶

According to Melini among others, the drug traffickers do not necessarily take over the illicit timber operations or the booming illegal traffic in exotic jungle wildlife. The criminal rings overlap, sharing security and putting different products into the pipeline while maintaining separate structures that are not vertically linked.⁹⁷

The former tenants on the land bought for airstrips are often hired to work as protection for the drug flights. They can get as much as \$900 a month in a region where the annual per capita income is less than \$1,000.⁹⁸ Drug traffickers simply fly their small aircraft below the radar coverage of 400 meters to land in pasture where fence posts can be removed quickly to disguise the land’s true purpose. Unloading a plane with several hundred kilograms takes only about 10 minutes, and during unloading the aircraft can be refilled with fuel from a truck. The entire operation takes less than 20 minutes.⁹⁹ Along the smuggling routes already pioneered by timber traffickers, the cocaine is moved to Mexican traffickers.

The aircraft then return south or can be ditched deep in the jungle as a simple cost of doing business. The abandoned aircraft are so plentiful that the region has been dubbed the “airplane graveyard.”¹⁰⁰ This has led some Guatemalan officials to declare the problems in the Petén forests and national parks national security issues, not simply conservation issues. Yet forest guards are often armed with machetes to face the drug traffickers’ AK-47s.

The pace at which criminal organizations in Guatemala form is accelerating as Mexican DTOs move south in the face of the conflict with the Mexican state, squeezing the traffickers out of their traditional operating theaters. As General Douglas Fraser, commander of the U.S. Southern Command responsible for Latin America,

recently noted, “this resultant ‘balloon effect’ causes the trafficking organizations to seek safe havens in ‘ungoverned spaces’ like the Petén in Guatemala, the Miskito Coast of Honduras and Nicaragua and the Darien regions in Panama.”¹⁰¹

Social networks and overlapping agendas

As discussed earlier, it is a mistake to conceive of regions like the Petén as ungoverned spaces. The drug traffickers and, to a lesser degree, human smugglers and loggers impose an alternative structure of authority to their own benefit.

As one long-time resident of the region has stated, “[the drug traffickers] are the ones who throw the big parties. The rodeos are sponsored by them. I mean, if somebody is dying and needs an operation, they’re the guys that will loan them money to go get their operation. You know, when people have been kidnapped around here, the guys will say, okay, we’ll get you five or six guys, we’ll go and do the rescue, no problem. And they’ll go in, they do the rescue, they kill the bad guys, and it is over.”

In return, the drug traffickers demand loyalty and silence from the communities in which they operate—a certain type of social acceptance that makes it more difficult for anyone to divulge the activities to authorities.¹⁰²

Clear ties between logging organizations and Mexican DTOs have come to light, as have attempts by enforcement and security wings of Mexican DTOs to recruit specific types of “assets” in the region, as now discussed. These can be analyzed under the fixer-chain approach depicted in figure 2.1.

The local fixer–super fixer–facilitator networks

It is hard to identify the local fixers in this particular arrangement because of the few court cases and investigations to draw on, and because field research is rare and dangerous. Their roles can be discerned, though.

Those who know the land and the traditional smuggling routes and points of entry are vital to anyone seeking to operate in the generally violent and inhospitable region, particularly where there is no visible established authority. Understanding the local power structure—and it is highly localized by town and village—is crucial to anyone seeking to do business.

Given the geographic complexities of the area, it is essential to work with those having local knowledge. Local operators know the long-standing clandestine routes through the jungle and along rivers to Mexico that are used by human traffickers and loggers. The uninitiated have to be lucky to find them. Local fixers are also vital in providing trustworthy personnel for protecting landing strips, moving fuel for aircraft, unloading aircraft and physically moving the cocaine, and myriad other activities.

Local fixers respond to groups of super fixers such as the gang known as Los Pelones (The Bald Ones), who operate in the northern part of the Petén protecting different types of local criminal activities, particularly logging in local communities and narco airstrips. The gang also provides local protection to operators of the Sinaloa Cartel,

the most powerful of the Mexican DTOs and perhaps growing in importance as a semi-independent enforcement operation.¹⁰³ While the literature is scant, it is groups like this who know the local community and can arrange and oversee on-the-ground operations, while reaching out to major trafficking organizations.

In the Petén, as in Liberia and elsewhere, these super fixers also provide useful links to groups with special skills that may not be available locally. The role of super fixers in the Petén is largely played by Los Zetas, former members of the elite counternarcotics unit known as the Airborne Special Forces Group (Grupo Aeromóvil de Fuerzas Especiales, or GAFES) who carry out outreach programs on behalf of Mexican DTOs. The targets for recruitment, because of their lethal skill sets, are Kaibiles, specially trained counter-insurgency forces of the Guatemalan army that gained notoriety during the civil war for their ruthless attacks on guerrillas, on their suspected civilian supporters, and on civilian populations clearly uninvolved with the rebels. Their training school, where many Latin American armies send recruits to train, is in the Petén.

The origin of these groups helps explain their ability now to act as super fixers across the region through the fraternity of elite combat troops who fought in the civil wars of the 1980s.¹⁰⁴ The U.S.- and British-trained GAFES deserted to the Gulf cartel, one of the most important Mexican DTOs, en masse in 2000 and became most active in Nuevo Laredo, a key cocaine transit area.¹⁰⁵ Because of their extensive training in military tactics and their knowledge of weaponry, intelligence gathering, and security, the group quickly came to dominate the internal security landscape of the cartels. The original members of the organization trained at least 10 other people in the same tactics, and by 2003 the Mexican authorities had identified Los Zetas, numbering several hundred, as the most formidable death squad in the history of Mexican organized crime. Their hallmark was brutality, which included beheadings, dismemberment, and burning victims alive.¹⁰⁶

The group has since broken off from the Gulf cartel and formed a separate, powerful DTO. Using their superior military capabilities, Los Zetas carved out a pipeline from the U.S.-Mexico border region of El Paso eastward, moving south down the Caribbean coast, south through Veracruz, east through Tabasco, and into the Yucatán peninsula.¹⁰⁷ Their grotesque style of violence continued apace, but it was not random in purpose or execution. As Hal Brands has written:

The hits are thus not meant solely to batter the police and the military, but also to sow fear and demonstrate that the cartels – not the government – are dominant in Mexico. Many drug-related killings are spectacularly violent, aimed at achieving the maximum psychological impact.¹⁰⁸

The Kaibiles were accused of scores of massacres, some involving more than 100 civilians at a time, during the civil war. When the war ended many of them were demobilized as the military reduced its size. Yet due to their training and the prevalent violence and corruption, many continued to work for the military or some of its shadowy organizations that had ties to the international drug trade and to other illicit commerce, such as human smuggling and stolen vehicles.¹⁰⁹

Recently it seems new work opportunities arose. In 2008 Los Zetas began airing radio advertisements in the Petén looking for Kaibiles or former Kaibiles to hire. “We invite all citizens who have served in the military and graduated as Kaibiles to work securing vehicles transporting merchandise to Mexico,” the radio spots said.¹¹⁰

While these armed groups can provide the muscle and logistical support necessary for operations, they do not actually control the cocaine trafficking. (That may no longer be true for Los Zetas, but it was when recruitment and outreach initially took place). These groups are key gatekeepers and necessary to the process, but ultimately they are hired guns for the upper echelons of the Mexican DTOs, particularly the Sinaloa organization.

The marketing and control of the transit areas in Mexico fall to the facilitators of the drug trade, where the drug cartels are in constantly shifting alliances and at war with the Mexican state. These facilitators not only control the flow of cocaine northward but also provide the finance for airstrip land, the weapons needed, and the fees for local fixers and super fixers.¹¹¹

The Petén shows some similarities to Liberia in criminal structures, but the activities are carried out because of the right combination of lucrative circumstances in the absence of the state rather than in partnership with a criminal state. The legacy of decades of violence and war, whose underlying causes remain unresolved, also play a crucial role—as in Liberia—in allowing the criminal organizations to flourish. The availability of well-trained combatants who feel no loyalty to the state is a boon for the nonstate actors.

The Petén also shows how different criminal groups and other nonstate armed actors can become absorbed by new and stronger actors, in some ways paralleling the movement of the traditional elites in Liberia from the Doe to the Taylor regime. As in Liberia, the groups in the Petén do not operate in a single arena of criminal activity nor is the criminal pipeline linear, but circular. And again the criminality revolves around a specific geographic space that is vitally important to the success of the operations. The longer the criminal structures operate, the more difficult it becomes for the state to reestablish a credible, positive presence—even if has the desire to.

AFRICAN PALM IN COLOMBIA

The African palm plantations in Colombia, particularly in the Afro-Colombian communities on the Pacific coast, highlight a third variation in the relationship between organized crime and commodities. Research and literature are again sparse, and the issue cannot be examined in as much depth as the first two case studies. Still, a growing body of evidence points to a third type of criminal activity that is a hybrid of the two previous systems: conflict that is both driven by profit-motivated para-state actors and that is protected primarily by subnational political structures. While the state itself is not criminalized, as Taylor's Liberia was, parts of local and regional states are, and many of them have tentacles that reach into the national government.

Palm oil, rather than being an illicit product or under the control of a criminal and predatory state, has sparked violent land seizures by paramilitaries, who have driven traditional Afro-Colombian communities off the land they collectively owned under indigenous title (and with constitutionally recognized rights). The seized land was then classified as being without an owner because the community no longer existed. It was then sold or rented by the government or new owner to businesses, which converted it from forest

and traditional subsistence agriculture to large-scale palm plantations, some of which ironically received development subsidies from the U.S. Plan Colombia.¹¹²

So, the production and sale of the product, palm oil, is legal. The criminal interaction is in violently acquiring the land for use in producing a licit product.

The paramilitaries (and demobilized “former” paramilitaries) have connections to local landowning elites and government officials, as well as to super fixer transnational DTOs. Some reports suggest that their supply networks for weapons, as well as the relative impunity with which they operate, derives from their networks inside the state security forces, in the highest reaches of both the executive and legislature, and in subnational political structures.

This pattern of violence is not unique to palm oil—it has been observed for other crops and livestock. But the pressures to seize land may be compounded by the Colombian government’s policy of greatly expanding African palm cultivation, as it views palm oil as a valuable export commodity, used in hundreds of products from soap to cosmetics. Palm oil is also touted as a renewable energy source that can be used as a relatively clean fuel. Colombian officials expected to put several new processing plants on line in 2009. Palm oil production was forecast to increase from 685,000 tons in 2005 to 806,000 tons in 2008 and to 872,000 tons in 2009.¹¹³

The Chocó and Urabá regions of Colombia have long been conflict areas, with paramilitary groups under the umbrella of the AUC and FARC inflicting significant damage. Both groups have been heavily involved in drug trafficking and have been declared terrorist groups by the U.S. government. The FARC has been designated a terrorist organization by the European Union. In recent years, however, groups that grew out of the AUC’s official demobilization have been the most involved in human rights abuses and the African palm issue.

One of the most comprehensive studies on the human rights impact of African palm cultivation was conducted in 2006 by a team of nongovernmental organizations. It found:

There is clearly a high level of causality between forced displacement and land theft, and between land theft and palm production. In all palm complexes there has been forced displacement, and in all of them there are cases of illegal appropriation of land.¹¹⁴

The study found that a consistent model was used to drive communities from their lands, which would then be planted with African palm. The steps included armed incursion with its associated crimes and human rights violations; illegal and violent expropriation of land as a result of the above acts; forced displacement of owners and/or population occupying the expropriated lands; and the deforestation of natural forest (and presumably sale of standing timber) and subsequent planting of palm on the seized land.¹¹⁵

Various studies tied the purchase of large plots of land and the growth of African palm directly to the AUC, a link confirmed publicly by Vicente Castaño. He was one of the top leaders of the AUC and eventually helped

negotiate the demobilization of the group. This link shows the ties between the paramilitary forces and influential political and economic forces tied to the state.

“In Urabá we have palm plantations,” Castaño told *Semana* magazine in November 2006. “I personally got businessmen to invest in those projects because they are long lasting and productive. The idea is to take rich people to invest in that kind of project in different parts of the country. When the rich arrive, so do state institutions. Unfortunately, the state only operates when the rich are present.”¹¹⁶

When the AUC demobilized under the Justice and Peace Law beginning in 2006, many of those who were to turn in their guns simply went into drug trafficking on their own or became private security operatives. (The law was heavily criticized because it exonerated senior paramilitary leaders from facing justice for their crimes.)¹¹⁷

Eventually new gangs such as the *Aguilas Negras* and *Los Rastrojos* emerged from those supposedly demobilized groups. “Only the name is different,” said one Afro-Colombian leader. “They are the same people. The top commanders have gone. The new commanders are those who were previously second- and third-level commanders.”¹¹⁸

These groups have been named in a host of land-seizure denunciations, and by some estimates 80 percent of the land used by the palm oil industry has serious legal issues with titles.¹¹⁹

Given the overall lack of investigation into the paramilitary groups’ current structures, it is difficult to know how applicable the model of fixer–super fixer–facilitator is in this case. The paramilitary structure and supply lines for arming themselves and moving cocaine are, however, well known and point to the types of networks currently employed, assuming that, as noted above, the same people are involved.

The flexible cocaine networks have changed some of their routes but essentially rely on territorial control for moving the product. The Chocó and Urabá regions have been zones of conflict for a reason: they sit astride key access routes for cocaine to move from production sites to the ocean. Chocó is on the Pacific side and the Urabá gulf is on the Atlantic side of the Panama isthmus. Control of the physical space for moving the cocaine is important to multiple groups and a principal reason for the violent activities that mark the regions.

The unfortunate fact that much of the best land for African palm also lies in this region may offer an explanation for much of the current violence: the nonstate and substate armed groups want the territory to maintain their drug-trafficking structures, and the African palm companies may want the protection and coercion the armed groups can provide. While there is little good research on this subject, the paramilitary groups were initially started to protect landlords, and ties between the two groups have been strong since the 1960s.

There is much speculation that one of the primary networks used by the AUC and its legacy organizations to protect the cocaine trade involves local political elites who offer political and judicial impunity to the combatants in exchange for significant campaign contributions and physical protection from the FARC.

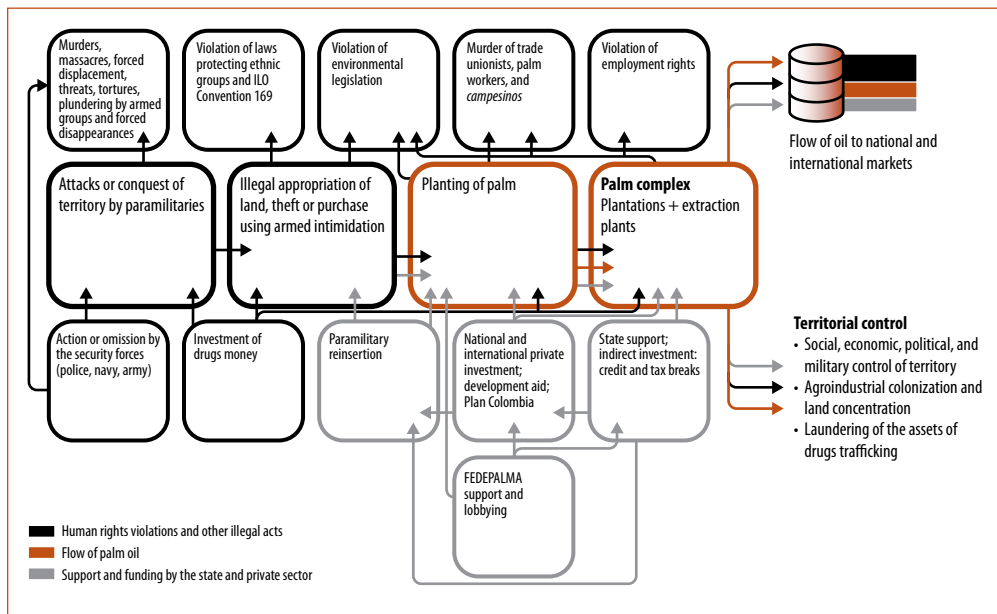
Helping remove the communities on the best land may simply be an added cost of doing business in the traditional cocaine corridor.

This protection is important because it places the criminal groups at a crucial nexus between transnational cocaine-trafficking organizations and the will of local (sometimes national) political and economic elites. In much of rural Colombia, including the regions where the push to plant African palm is strongest, the national government maintains very little presence and local governments are often mini states, run by and for a small elite.¹²⁰

As noted earlier, the line between public service and private gain is often blurred in criminal states, and in this case the state is not necessarily the central government but local and regional entities. Regional entities, in turn, often have ties at the national level. The “narco-scandal” in Colombia—a series of embarrassing revelations of drug corruption—reached senior levels of the presidential palace, the congress, and the military.¹²¹

Using a flow chart from Mingorance (2006), one can deduce that local fixers who operated in the region carry out the abuses that drive people from their land (figure 2.5). As noted, they are widely identified as having been part of the AUC and are now part of the armed legacy groups that have operated in the region. The super fixers would be those, like Castaño, who can deal with the local fixers but also reach upward to ensure political protection for and economic benefit from the emerging businesses.

FIGURE 2.5. COLOMBIA PALM OIL AND VIOLENCE FLOW CHART



Source: Mingorance 2006, p. 51.

It is clear from the testimony of some of the paramilitary leaders like Salvatore Mancuso—a former leader of the AUC now in prison in the United States for cocaine trafficking—that there was a clear line of communication from senior AUC commanders to local, regional, and national political leaders. Communication was, though, limited to a few people because of the political exposure the relationship entailed for both sides. From this, one can reasonably conclude that there were two overlapping sets of actors: one on the cocaine trafficking side for profit and one on the political side for protection and impunity. The nexus comprised the leaders of the criminal groups, who operated in both worlds. The facilitators would be those retaining the contacts in the outside world to sell cocaine, import weapons, and carry out the money laundering frequently alleged to be central to the palm oil industry.

Research is currently insufficient to provide a more complete picture of the links and organizational structure of the African palm case. Strong evidence has, however, emerged that several of the same super fixers who were active in other conflicts were also directly involved in different aspects of the Colombian conflicts, thus showing that nonstate actors like the AUC and the FARC have the capacity to access transnational networks.

One example: Peruvian intelligence chief Vladimiro Montecinos arranged for Viktor Bout's aircraft to carry two loads of weapons to Peru from Jordan and on the way air drop some 10,000 AK-47 assault rifles to the FARC in Colombia in 1997 and 1998. The weapons originated in Jordan and the FARC contracted Bout to deliver the weapons, which were included in a legal purchase of assault rifles for Peru. It was not known until several years later that Montecinos, although on the CIA payroll, was deeply involved in cocaine trafficking and in providing weapons to a neighboring insurgent group. While details of how the FARC contacted Montecinos and how Montecinos contracted Bout remain murky, it is clear that the FARC had access to a global super fixer—and likely still does.¹²²

As seen in Liberia, some of the weapons that the Aziz Nassour network attempted to purchase in 2001 for Charles Taylor ended up in the hands of the AUC in Colombia. According to a report by the Organization of American States, some 5,000 AK-47 assault rifles and 2.5 million rounds of ammunition arrived in the Colombian port of Turbo in 2001 aboard a Panamanian-registered ship *The Otterloo*, where weapons for the paramilitary forces were unloaded. The weapons were part of the arsenal that Nassour was attempting to buy for Liberia. They may have been diverted from the initial purchase of Yelenik from Nicaraguan stockpiles without Nassour's knowledge.¹²³

Regardless of how the weapons ended up with the AUC, it is once again clear that the group had access to an international network of super fixers that could help them procure arms in the international market.

FACTORS IN COMMON

The three case studies have multiple factors in common that are worth examining in the framework of the *World Development Report's* core focus—on repeated cycles of violence, interlinked forms of violence, and violence with cross-border and transnational links—supporting the conclusion that state fragility and the risk of conflict are strongly interlinked.¹²⁴ The consequences of the repeated cycles of violence and their multiple links is the affected regions' inability to move beyond the endemic poverty and precarious security that in turn renew the cycles of violence.

Before examining these three common areas, this section looks at two other threads linking the three case studies: lack of a positive state presence and shared stress factors.

Ungoverned spaces and the exercise of political power

The Petén and Colombia cases show the lack of a positive state presence, in contrast to the strong territorial control of the criminalized state in Liberia. However, such a lack in the Petén and Colombia (and the lack of any state presence in much of Liberia before 1997) does not imply at all that these physical spaces are ungoverned, which connotes a lawless region with no controlling authority. For several years before Taylor became president, his NPFL had a virtual monopoly on power in rural territories covering much of Liberia, which he called "Taylorland." In the Petén those associated with drug trafficking or illegal logging try (and usually succeed) to ensure that the state is not allowed to function or functions only in ways that benefit the illicit trade. In Colombia paramilitary organizations—sometimes allied with business interests—in some cases replaced traditional village governance structures.

As Reno noted, many of the groups involved in governing areas outside state control can tolerate multiple allegiances as long as they profit from the commercial networks that emerge. He uses the example of Taylor's working with Lebanese traders in a description that is applicable elsewhere.

A Lebanese trader could hold Lebanese citizenship, manage clandestine cross-border trade with Ivorian customs officials who were an integral part of Taylor's commercial network, and still play a role in Taylor NPFL provided the trader's actions helped to finance Taylor's warfare and deny resources to his rivals. Taylor and his NPFL did not promulgate a political ideology as much as a political theology, an all-encompassing commitment to a political authority across a wide range of realms.¹²⁵

Nonstate actors exercise significant control over the regions discussed, and that control may occasionally be contested by state forces. These regions are in fact governed by nonstate actors who have the military force or popular support (or a mixture of both) to impose their decisions and legal norms. These alternative power structures constitute a primary reason why a state loses legitimacy and often fails. The Federation of American Scientists refers to these groups as "para-state" actors.¹²⁶ Regardless of the terminology, the lack of a positive state presence or a deeply corrupted state presence should not be construed as a lack

of governance, just as governance that has been corrupted to personal rather than public ends cannot be construed as a positive state presence.

Rand Corporation has identified four indicators of “ungovernability,” each with a subset of indicators, which are also useful in looking at organized crime and commodity trafficking:¹²⁷

- Lack of state penetration, including absence of state institutions; lack of physical infrastructure; corruption among the few state agents that are present or who visit sporadically; prevalence of the informal economy; and social and cultural resistance.
- Lack of monopoly on force, including the presence of private armed groups, criminal networks, and the population’s access to weapons.
- Lack of border controls.
- External interference, meaning how other countries or nonnational actors influence the region in question for political gain or as an alternative to a nation’s own governance of the region.

Broadly, the three cases showed “abdicated governance” in which the “central government, instead of operating to produce public goods such as safety and order, infrastructure and services, abdicates its responsibilities” in parts of the national territory.¹²⁸ Even in Liberia, where the state exerted some control for extractive purposes, there was an almost complete lack of positive state governance and a reliance on economies in the service of a criminal state rather than in conflict with the state.

Stress factors and societal capacity

In all three cases significant internal stress factors added to the lack of a positive state presence. They included ready access to cheap weapons, since guns allow the many unemployed young men (especially among disenfranchised ethnic or religious minorities) to control territory that contains a “honey pot” that in turn has allowed the armed group to endure. An abundance of lootable natural resources such as timber, alluvial gems, or certain minerals were also identifiable in each case, as were external shocks.

Focusing on these shocks, one sees that in Liberia the role of Libya in fomenting and funding revolution and training its leaders (including Taylor) as well as the geopolitical situation of the country (the United States maintained several important regional intelligence facilities) were vital in aiding Taylor. In turn the “spillover” of Taylor’s campaign of criminality destabilized neighboring Sierra Leone, Côte d’Ivoire, and Guinea.

In the Petén the external shocks largely center on the drug trade in neighboring Mexico, the traffic of illegal immigrants into the United States, and the vast expansion of the cocaine pipeline, which in turn strengthened the capacity of criminal networks to engage in other activities such as illegal logging.

The increase in demand for palm oil in Colombia and its rising price in the international market (especially in the wake of increased petroleum prices and geopolitical concerns over oil dependence) are external stress factors that make the seizure of land for palm plantations economically viable. As recent press reports document, stress factors include the payment of millions of dollars in development aid, much of it provided

by the United States under Plan Colombia, to wealthy families in isolated regions where the palm is grown. This likely serves to further strengthen the substate actors active in the region's violence for many decades.

In all three cases the role of demand from international markets and the general lack of discrimination by consumers have contributed to driving criminal cycles of commodity traffic.

Each society's capacity to respond to stress varies but tends toward the extremely limited. Guatemala's central leadership has limited capacity to confront the nonstate actors. In Colombia, where leadership has recently been very strong, the situation remains complicated and fragile, with the institutional ties of the paramilitaries weakening. At the same time, the state is pushing to expand African palm but is scarcely protecting the most vulnerable communities. Liberia, remarkably, has shown the greatest capacity to respond, albeit with an enormous amount of international assistance, including UN peacekeepers who have helped to break the conflict cycle. The role of UN sanctions was also very important, in driving reforms and in freezing assets and making travel harder (even though facilitators like Bout bragged about "teaching a course in sanctions busting").

Repeated cycles of violence

In each case the legacies of prior conflicts and current state fragility have significant consequences. The lack of a positive state presence has led to governance by violent nonstate actors in broad areas of national territory and entrenchment of transnational criminal organizations that are often more powerful than the state.

The available pool of highly trained and often unemployed young men has made recruitment of capable fighters easy and relatively cheap, so that different economic and political groups can hire the muscle they need to protect their own interests. This not only perpetuates the culture of violence, but often leads to turf battles and protection rackets to ensure an economic stranglehold on parts of the economy.

These repeated cycles also make it ever harder to establish positive state control because of the parallel culture of impunity that often grows in the shadow of the violence. Honest officials can be intimidated or killed, the justice system overrun, and the rule of law destroyed.

In Liberia the violence of the Taylor-led civil war grew out of the increasing violence of the Doe regime and the increasing delegitimization of the state. The Taylor regime, while proving efficient at extracting commodities for personal gain and at running a multifaceted criminal enterprise, brought no positive state presence to the whole country. This contributed to the next cycle of violence that drove Taylor from office.

In the Petén the violence of the civil war, paid for in part by the illegal extraction of timber, gave way to violence of a variety of organized criminal activities, from continued illegal logging to illegal exotic species trafficking to cocaine trafficking. Each of these activities has taken a tremendous toll on the environment.

The state has never exercised effective control in the Petén. This has led in recent years to a fragile type of imposed peace, enforced by drug traffickers and usually broken when the state tries to exert its authority

in the region. Given the Mexican government's militarized war against the Mexican DTOs (with strong U.S. support) and the international pressure on Guatemala to gain greater control of its territory to aid in that effort, the next cycle of violence in the Petén will likely revolve around territorial control of the region.

In Colombia the violence associated with the land seizures for African palm flows from the decades-old war between the paramilitary forces of the AUC and left-leaning groups like the FARC. Although the FARC has been largely neutralized and the AUC has officially demobilized, the violence has continued in some areas, in part because of the manpower trained in fighting, lack of other opportunities, and easy access to weapons.

Interlinked forms of violence

Different types of violence are strongly linked, and one cannot disaggregate them in a useful manner in these three cases.

In Liberia the violence of different militias was strongly linked to the presence of security guards in the timber concessions (and vice versa, with the security guards using violence to help the militias). Neither group operated independently of the elite Anti-Terrorist Unit and other special forces favored by the Taylor regime. Nor could that violence be decoupled from the violence in neighboring Guinea and Sierra Leone, where each party had violent proxies.

In Guatemala the drug-trafficking violence cannot be disassociated from the armed groups that offer protection to different types of criminal organizations. Nor can the cocaine pipeline in the Petén be really separated from the broader regional pipeline that involves Central American gangs and their Mexican counterparts.

The Colombian case offers perhaps the clearest example of the interlinked forms of violence. Here, nonstate actors long involved in the drug trade and counterinsurgency operated as agents for hire or as independent entrepreneurs. None of these forms of violence are separate from the others, however. The revenue generated from one activity can be used to fund another, and the human capital easily moved from one task to another.

Violence with cross-border and transnational links

Liberia and Colombia are examples of states where the commercial interests of predatory groups crossed borders. In Liberia the cross-border violence was most closely linked to acquiring commodities, particularly diamonds, to fund Taylor's struggle for power. In Colombia, violence has had fewer cross-border links, although it does occasionally spill into neighboring Ecuador and Panama.

Guatemala could be categorized as organized crime and trafficking. The Petén is part of the pipeline carrying cocaine and other illicit products from South America to the United States via Mexico. Most of the violence in this case is generated by external actors in Mexico and by the internal dynamics of the Mexican DTOs.

However, the lines are not entirely clear cut. Liberia had elements of linking global ideologies to local grievances, in the cases of Hezbollah and al Qaeda. In Colombia the violence in the African palm land disputes came directly from groups that also had strong ties to DTOs, which generate violence because of

that transnational trade. In the Petén international organized crime and trafficking groups encompass local predatory groups such as loggers and human traffickers.

It is precisely this blurring of the lines, both in types of groups operating and how they link, that greatly complicates the ability of states, even with the political will and resource base, to tackle the threats. Yet the commonalities also offer some identifiable elements that, if states deal with them effectively, can help reduce the use of commodities to fund conflicts. They can also help establish a positive state presence that narrows the operating space for organized criminal groups.

Some considerations

The following points encapsulate the primary lessons:

- A positive state presence is vital for preventing conflict and for severing or limiting the links among organized criminal organizations and illicit commodity traffickers. This means more than the simple presence of the state in the form of military forces and law enforcement agents, as Liberia clearly shows, but it does require the physical presence of positive state elements (schools, jobs, health care, markets for products, etc.), as the Petén and Colombia show. When that state presence exists, even in somewhat limited form, organized criminal groups may operate but lack the space and infrastructure to challenge the state as an entity or to become the de facto state in subnational areas.
- Commodity trafficking can be both the cause of conflict and a primary way of maintaining it. Before and after conflict, gaining a positive state presence in these areas is key in breaking the cycle of violence. Applying anti-money-laundering laws, anticorruption approaches, and best business practices can help strengthen the state's ability to meet the needs of its population. In particular the expectations of local communities in the commodity-producing areas have to be met, so that they feel they have a stake in maintaining the government rather than fighting it.
- Sanctions have a role. Liberia shows that targeted sanctions on commodities such as timber and diamonds can have a direct impact on the financial structure of a criminal state.
- Commodity conflicts take place in identifiable and predictable geographic locations, and conflicts revolve around those physical spaces. But because the commodity is only valuable if it can be accessed and sold by a party in the conflict, control of those locations is a central axis of conflict.
- These locations do not map neatly onto a state's territory. They are often subnational or transnational, operating across borders. They are also expanding, so that the conflict-generated violence and disorder spread to more than one state. This is clear in Liberia and the Petén.
- To extract value from the commodity, the controlling armed group is often forced to rely on an interlocking set of social networks. These groups, or at least their key parts, have to operate in the physical space where the commodity is present, often at a regional level.
- Given the multistate nature of many of the commodity conflicts, solutions require regional and multistate cooperation. As the West Africa and Mexico–Central America pipelines demonstrate, attacking each conflict in isolation simply reroutes the violence and commodity trading.

- The social networks seldom deal in one single commodity but trade a range of goods and services, making them difficult to disrupt.
- Still, disrupting these networks—particularly their international facilitators, but also regional and local operators—is one of the best methods to undermine armed groups' operations. Removing key facilitators in the circular pipeline has a direct impact on the flow of money, weapons, and other services. In West Africa the removal of, for example, Viktor Bout would have disrupted weapons delivery to numerous, simultaneous commodity conflicts. If any nation had taken seriously the UN travel ban and asset forfeiture lists, Bout could have been put out of business earlier. Countries should adopt sanctions as national law and prosecute those who violate the law.
- Commodity conflicts tend to show cycles of violence that have proven very difficult to break. This is particularly true in areas of high regional violence, where one stress factor is that weapons are cheap and easy to acquire. Without determined action in the immediate aftermath of one phase of the conflict, a second stress factor grows in importance: the availability of battle-hardened veterans of the previous conflict who can carry on the conflict in ever more sophisticated ways.
- After conflict, the international actors involved must place a very high priority on diminishing these two stress factors, and they can only do this within a regional framework. Without that framework, combatants can migrate to regional safe havens and retain their access to weapons—and their ability to create conflict. This regional approach requires multiple nations to commit to ending the exclusion and isolation of the potential conflict area, thereby making conflict “not feasible” in Collier’s model.
- Such an approach also requires a much stronger positive state presence, resource-exploitation mechanisms that bring in benefits, and the capacity to meet social needs.

REFERENCES

- Agence France-Presse. 2008. “Alleged Dutch Blood Timber Trader Acquitted on Appeal,” March 10.
- Amnesty International. 2002. “Guatemala’s Lethal Legacy: Past Impunity and Renewed Human Rights Violations.” February.
- Associated Press. 2010. “Guatemala Arrests Highlight Drug Corruption,” March 3.
- Balch, Oliver and Rory Carroll. 2007. “Massacres and Paramilitary Land Seizures in Colombia.” *The Guardian*, June 5.
- Ballentine, Karen and Heiko Nitzschke. 2003. “Beyond Greed and Grievance: Policy Lessons From Studies in the Political Economy of Armed Conflict.” *IPA Policy Report*. International Peace Academy, New York.
- Bayart, Jean-Francois, Stephen Ellis, and Béatrice Hibou. 1997. “De l’état kleptocrate à l’état malfaiteur?” In *La criminalisation de l’état en Afrique*, ed.
- Jean-Francois Bayart, Stephen Ellis, and Béatrice Hibou, pp. 17–54. Paris: Éditions Complexe.
- BBC Three. 2003. “Blood Diamonds” *The Third Degree*, first broadcast in Great Britain on February 10.
- BBC News. 2010. “Former Guatemalan President Alfonso Portillo Arrested,” January 26.
- Belgian Police dossier titled “Public Prosecutor File 1/2002, “Case LIBI,” Federal Police, GDA Antwerp, Diamond Section, obtained by author while working for the Washington Post.
- Brands, Hal. 2009. *Mexico’s Narco-Insurgency and U.S. Counterdrug Policy*. Carlisle, PA: U.S. Army War College, Strategic Studies Institute.
- Braun, Michael. 2006. Testimony before the Committee on Government Affairs, Subcommittee on Criminal Justice, Drug Policy and Human Resources, U.S. House of Representatives, April 28.

- . 2008. "Drug Trafficking and Middle Eastern Terrorist Groups: A Growing Nexus" Presented to the Washington Institute for Near East Policy, Washington, DC, July 25.
- Bright, Arthur. 2007. "Colombian Army Head Collaborated with 'Terrorist Paramilitaries'." *Christian Science Monitor*, March 26.
- Burnett, John. 2006. "Guatemala's Parks Lie in the Path Drug Traffickers." National Public Radio, September 24.
- Center for International Policy. 2008. "Para-Politics Scandal." Understanding Colombia Series. Washington, DC. March.
- "Charles Taylor's Influence." Memorandum for the Record, Special Court for Sierra Leone, Office of the Prosecutor, 29 October 2004, internal SCSL document obtained by the author from the Court. See also: Glenn R. Simpson, "UN Ties Al Qaeda Figure to Diamonds," *Wall Street Journal*, June 28, 2004, p. A5.
- Clark, Charles. 2000. "Land Tenure Delegitimation and Social Mobility in Tropical Petén, Guatemala." *Human Organization* 59 (Winter). Available at http://findarticles.com/p/articles/mi_qa3800/is_200001/ai_n8878412/ Accessed January 21, 2011.
- Coalition for International Justice. 2005. *Following Taylor's Money: A Path of War and Destruction*. Washington, DC.
- Collier, Paul, Anke Hoeffler, and Dominic Rohner. 2008. "Beyond Greed and Grievance: Feasibility and Civil War." *Oxford Journal of Social Sciences* 61 (1): 1–27.
- Commission for Historical Clarification. 1999. "Guatemala: Memory of Silence." Final Report. February.
- Cooper, Robert. 2002. "The Post-Modern State." In *Re-Ordering the World*, ed. Mark Leonard, 11–20. London: The Foreign Policy Centre.
- Corchado, Alfredo. 2006. "The Mexican Drug Cartel Enforcers Known as Zetas Are Growing in Strength." *Dallas Morning News*, September 29.
- de Andrés, Amado Philip. 2008. "Organised Crime, Drug Trafficking, Terrorism: The New Achilles' Heel of West Africa." Comment. Fundación Para las Relaciones Internacionales y Diálogo Exterior (FRIDE), Madrid. May.
- Dickson, Elizabeth. 2009. "Chuckie Taylor Sentenced to 97 Years." *Foreign Policy*, Passport Blog, January 9. Available at http://blog.foreignpolicy.com/posts/2009/01/09/chuckie_taylor_sentenced_to_97_years Accessed January 21, 2011.
- Economist*. 1993. "Guatemala: Cutting Down the Mayan World," September 25.
- . 2010. "The Andean Laundry: Worries that Organised Crime is Tightening its Grip," March 25.
- Ellis, Stephen. 1999. *The Mask of Anarchy: The Destruction of Liberia and the Religious Dimension of an African Civil War*. New York: New York University Press.
- Farah, Douglas. 1994. "Haitian Elite Set to Profit From U.S. Presence." *The Washington Post*, September 24.
- . 2002a. "Liberian Leader Again Finds Means to Hang On: Taylor Exploits Timber to Keep Power." *The Washington Post*, June 4.
- . 2002b. "Report Says Africans Harbored al Qaeda: Terror Assets Hidden in Gem-Buying Spree." *The Washington Post*, December 29.
- . 2004. *Blood From Stones: The Secret Financial Network of Terror*. New York: Broadway Books.
- . 2007. "Case Study: Colombia." In *Crimes of War 2.0: What the Public Should Know*, ed. Roy Gutman and David Reiff. New York: W.W. Norton.
- . 2008. "The Criminal–Terrorist Nexus and its Pipelines." NEFA Foundation. Presentation delivered to U.S. Special Operations Command, Tampa, FL, January 14.
- . 2010. "Money Laundering and Bulk Cash Smuggling: Challenges for the Mérida Initiative." Working Paper Series on U.S.–Mexico Security Cooperation. Washington, DC: Woodrow Wilson International Center for Scholars.
- Farah, Douglas and Stephen Braun. 2007. *Merchant of Death: Money, Guns, Planes and the Man Who Makes War Possible*. New York: J. Wiley.
- Farah, Douglas and Glenn Simpson. 2010. "Ecuador at Risk: Drugs, Thugs, Guerrillas and the Citizens' Revolution." International Assessment and Strategy Center, Alexandria, VA.
- Fieser, Ezra. 2009. "Struggling to Keep their Land." *Global Post*, September 16. Available at www.globalpost.com/dispatch/the-americas/090826/peten-guatemala-land-small-farmers
- Financial Action Task Force. 2010. "FATF Public Statement." February 18. Available at www.gunster.com/newsletters-and-alerts/

- the-financial-action-task-force-identifies-ecuador-as-a-jurisdiction-with-strategic-amlcft-deficiencies-2/ Accessed December 28, 2010.
- Forero, Juan. 2005. "New Colombia Law Grants Concessions to Paramilitaries." *New York Times*, June 23.
- . 2010. "Despite Millions in U.S. Aid, Colombia Struggles to Reduce Poverty." *The Washington Post*, April 19.
- Fraser, Douglas M. 2010. Statement before the 111th Congress U.S. Senate Armed Services Committee, March 11.
- Gberie, Lansana. 2003. "War and Peace in Sierra Leone: Diamonds, Corruption and the Lebanese Connection." Occasional Paper No. 6. Ottawa: Partnership Africa Canada, Diamond and Human Security Project.
- Global Bioenergy Industry News*. 2008. "Colombia Planning on Palm Biodiesel Plants by 2009," October 20.
- Global Insight. 2008. "Report Claims Mexican Drug Gang Using Pirate Radio to Recruit Guatemalan Military." World Market Research Centre, April 24.
- Global Witness. 2002. *Logging Off: How the Liberian Timber Industry Fuels Liberia's Humanitarian Disaster and Threatens Sierra Leone*. London.
- Grayson, George W. 2008. "Los Zetas: The Ruthless Army Spawned by a Mexican Drug Cartel." *FPRI Bulletin*. Foreign Policy Research Institute, Philadelphia, PA.
- Hamilton, Roger. 2005. "Cutting a Forest to Save It: A Pioneering Experiment in Community Forestry Management." *IDBAmérica*. July.
- Hernandez, Herbert. 2008. "Ads Seek ex-soldiers for Smuggling Jobs." Reuters, April 25.
- Husken, Marian and Harry Lensink. 2007. "All This Misery Stems from One Source." *Vrij Nederland*, March 10.
- International Consortium of Investigative Journalists. 2003. *Making a Killing: The Business of War*. New York: Center for Public Integrity.
- International Labour Organization. 2009. *A Rapid Impact Assessment of the Global Economic Crisis on Liberia*. Geneva: International Labour Office.
- Jackson, Robert H. 1990. *Quasi-States: Sovereignty, International Relations and the Third World*. Cambridge Studies in International Relations. New York: Cambridge University Press.
- La Prensa*. 2008. "Carteles mexicanos han fortalecido el sicariato." October 30. Tegucigalpa, Honduras.
- Leech, Garry. 2009. "The Oil Palm Industry: A Blight on Afro-Colombia." *NACLA Report on the Americas*. July/August.
- Logan, Samuel. 2009. "Los Zetas: Evolution of a Criminal Organization." ISN Security Watch, Zurich, Switzerland.
- McGreal, Chris. 2010. "Viktor Bout, Suspected Russian Arms Dealer, Extradited to New York." *The Guardian*, November 16. Available at www.guardian.co.uk/world/2010/nov/16/russian-arms-dealer-extradited Accessed December 28, 2010.
- Mingorance, Fidel. 2006. *The Flow of Palm Oil Colombia-Belgium/Europe: A Study From a Human Rights Perspective*. Brussels: Human Rights Everywhere and Coordination Belge pour la Colombie.
- Moloney, Anastasia and Richard Lapper. 2007. «Uribe Aloof as 'Paragate' Creeps up on the Palace.» *Financial Times*, March 28.
- Organization of American States. 2003. "Report of the General Secretariat of the Organization of American States on the Diversion of Nicaraguan Arms to the United Self Defense Forces of Colombia." January 6. Washington, DC.
- "Número de Víctimas y Tasas de Homicidio en Guatemala (1999-2006)," (Number of Victims and Homicide Rates in Guatemala 1999-2006). Policia Nacional Civil de Guatemala, Observatorio Centroamericano Sobre la Violencia. Available at http://www.ocavi.com/docs_files/file_385.pdf Accessed January 21, 2011.
- Preston, Julia. 1996. "Guatemala and Guerrillas Sign Accord to End 35-year Conflict," *New York Times*, September 20.
- Public Prosecutor File 1/2002, Prosecutor's File Number AN.27.97.1393/01-Subsection General Examining Magistrate, GDA Antwerpen.
- Rabasa, Angel, Steven Boraz, Peter Chalk, Kim Cragin, Theodore W. Karasik, Jennifer D.P. Moroney, Kevin A. O'Brien, and John E. Peters. 2007. *Ungoverned Territories: Understanding and Reducing Terrorism Risks*. Santa Monica, CA: Rand Corporation.
- Reno, William. 1999. *Warlord Politics and African States*. Boulder, CO: Lynne Rienner.

- Revista Semana*. 2006. "Habla Vicente Castaño." June 6. Bogotá, Colombia.
- Rosenberg, Mica. 2006. "Land Grabs Threaten Guatemala Rainforest." Reuters, May 26.
- Rotberg, Robert I. 2003. "Failed States, Collapsed States, Weak States: Causes and Indicators." In *State Failure and State Weakness in a Time of Terror*, ed. Robert I. Rotberg, 1–26. Washington, DC: Brookings Institution.
- Schaefer, Agnes G., Benjamin Bahney, and K. Jack Riley. 2009. "Security in Mexico: Implications for U.S. Policy Options." Santa Monica, CA: Rand Corporation.
- Schneider, Mark. 2006. "Guatemala at a Crossroads." Testimony before the Foreign Affairs Committee, U.S. House of Representatives, June 9.
- Shultz, Richard, Douglas Farah, and Itamara V. Lochar. 2004. "Armed Groups: A Tier-One Security Priority." INSS Occasional Paper 57. USAF Institute for National Security Studies, USAF Academy, CO.
- Simpson, Glenn R. 2004. "UN Ties Al Qaeda Figure to Diamonds." *The Wall Street Journal*, June 28, p. A5.
- Smyth, Frank. 2005. "Former Soldiers Find Work With Drug Traffickers." Inter-Press Service, November 22.
- Snyder, Richard and Ravi Bhavnani. 2005. "Diamonds, Blood and Taxes: A Revenue-Centered Framework for Explaining Political Order." *The Journal of Conflict Resolution* 49 (4): 563–97.
- Stein, Eduardo. 2006. "Guatemala at a Crossroads." Testimony before the Foreign Affairs Committee, U.S. House of Representatives, June 9.
- The Perspective*. 2001. "Nobody Plays With Taylor's Pepperbush," June 27. Monrovia, Liberia.
- Tobar, Hector. 2008. "Macaws Above, Outlaws Below: Drug traffickers, Illegal Tree Cutters, Migrant Smugglers—It's the Law of the Jungle Out There." *Los Angeles Times*, July 9.
- Truth and Reconciliation Commission of Liberia. 2009. *Title III: Economic Crimes and the Conflict, Exploitation and Abuse*. Vol. 3 of Final Report. Monrovia.
- Twaddell, William. 1996. "Foreign Support for Liberian Factions." Testimony before the International Relations Committee, U.S. House of Representatives, Washington, DC, June 26.
- United Nations. 2007. "Secretary-General Appoints Carlos Castresana Fernandez of Spain to Head International Commission Against Impunity in Guatemala." Press release, SG/A/1096, September 17.
- United Nations Security Council. 2000a. "Final report of the Monitoring Mechanism on Angola Sanctions." S/2000/1225, December 21. New York.
- . 2000b. "Report of the Panel of Experts Appointed Pursuant to Security Council Resolution 1306 (2000), Paragraph 19, in relation to Sierra Leone." S/2000/1195, December 20. New York.
- . 2000c. "Resolution 1306, (2000) [On the Situation in Sierra Leone]." 4168th meeting, July 5. New York.
- . 2001. "Report of the Panel of Experts on Liberia Submitted in Accordance with Resolution 1343 (2001)." UNSC S/2001/1015, October 26. New York.
- . 2002. "Report of the Panel of Experts Appointed Pursuant to Security Council Resolution 1408 (2002), paragraph 16, Concerning Liberia." UNSC S/2002/1115, October 25. New York.
- . 2005a. "List of Individuals and Entities Subject to the Measures Contained in Paragraph 1 of Security Council Resolution 1532 (2004) Concerning Liberia (The Assets Freeze List)." May 2. New York.
- . 2005b. "Security Council Committee on Liberia Updates its Travel Ban List." Press Release SC/8359, April 14.
- Weinstein, Jeremy. 2005. "Resources and the Information Problem in Rebel Recruitment." *Journal of Conflict Resolution* 49 (4): 598–624.
- Winer, Jonathan. 2002. "Illicit Finance and Global Conflict: Economies of Conflict: Private Sector Activity in Armed Conflict." Programme for International Co-Operation and Conflict Resolution, Fafo Report 380. Fafo Institute for Applied Social Science, Oslo.
- World Bank. 2010. "World Development Report 2011, Working Title: Conflict, Security and Development." Concept Note, January 7. Washington, DC.
- Xinhua. 2009. "Mexico: Narco-Traffickers Invest in Secret Airstrips in Guatemala," September 1.

NOTES

- 1 See, for example, Rotberg 2003.
- 2 Rotberg 2003.
- 3 Bayart, Ellis, and Hibou 1997.
- 4 Jackson 1990.
- 5 Ballentine and Nitzschke 2003, p. 13.
- 6 Collier, Hoeffler, and Rohner 2008.
- 7 See Snyder and Bhavnani 2005, pp. 563–597. Snyder and Bhavnani describe the “revenue imperative” of all states and nonstate actors to fund their activities, positing that “no revenue, no regime.” They tie the state capacity to administer those revenues to the possibility of conflict.
- 8 Winer 2002.
- 9 Collier, Hoeffler, and Rohner 2008.
- 10 Weinstein 2005.
- 11 World Bank 2010.
- 12 Ellis 1999, p. 94.
- 13 See Reno 1999, pp. 221–223, for a look at how accidents, luck, and an individual’s learning ability all help shape how the armed actor or warlord responds to internal and external factors.
- 14 See Snyder and Bhavnani 2005 for a description of how the Lebanese diaspora community in Sierra Leone was both favored in diamond mining and marginalized socially for the regime’s benefit and how the balance of coercive power eventually shifted in favor of Lebanese merchants.
- 15 Reno 1999, p. 82.
- 16 See Farah 1994, p. A4.
- 17 “Shadow facilitators” were first used as a term of art by the U.S. Drug Enforcement Administration to describe those individuals deemed to be controlling central points of interaction among drug traffickers and other criminal organizations, such as weapons merchants. See Braun 2008.
- 18 Farah and Braun 2007.
- 19 That is, outside legitimate state control and competence.
- 20 This typology was developed and is discussed in Shultz, Farah, and Lochard 2004.
- 21 Shultz, Farah, and Lochard 2004.
- 22 De Andrés 2008. De Andrés is the deputy regional representative for West and Central Africa, United Nations Office on Drugs and Crime.
- 23 For a more detailed look at this concept, see Farah 2008.
- 24 For an extensive case study on Ecuador, see Farah and Simpson 2010.
- 25 The global body charged with combating money laundering and terror financing.
- 26 See Financial Action Task Force 2010, and the Economist 2010.
- 27 Taylor is currently on trial in the Special Court for Sierra Leone for crimes against humanity committed in relation to the war in that country, but not for crimes committed in Liberia.
- 28 Ellis 1999, p. 90.
- 29 Twaddell 1996.
- 30 International Labour Organization 2009.
- 31 For a more complete look at this network, see Coalition for International Justice 2005. The author was lead investigator for that report.
- 32 UN Security Council 2002, p. 35; Coalition for International Justice 2005.
- 33 Cooper 2002, p. 18.
- 34 Coalition for International Justice 2005.
- 35 Global Witness 2002, p. 13.
- 36 UN Security Council 2000c.
- 37 Coalition for International Justice 2005.
- 38 Truth and Reconciliation Commission 2009, pp. 6–9.
- 39 See UN Security Council 2005a and 2005b. Kouwenhoven was arrested in Holland and convicted in June 2006 on charges of supplying weapons to the Taylor government via OTC in 2000–2003 and sentenced to 8 years in prison. An appeals court overturned the conviction in March 2008. See Agence France–Presse 2008. The Supreme Court, in turn, overturned the appeals court ruling and ordered a new trial, which began in December 2010. See <http://allafrica.com/stories/201012230695.html>.
- 40 Global Witness 2002, p. 17.
- 41 Truth and Reconciliation Commission 2009, p. 13.
- 42 Truth and Reconciliation Commission 2009.
- 43 The Perspective 2001.
- 44 Global Witness 2002, p. 17.

- 45 The most comprehensive documentation of both the human rights abuses and weapons trafficking can be found at Truth and Reconciliation Commission 2009, p. 19; Global Witness 2002; and Farah 2002a, p. A01.
- 46 Truth and Reconciliation Commission 2009.
- 47 Husken and Lensink 2007.
- 48 UN Security Council 2001.
- 49 Farah and Braun 2007, p. 156.
- 50 Farah and Braun 2007, pp. 155–159.
- 51 UN Security Council 2000b, paras. 224–226. See also UN Security Council 2001.
- 52 UN Security Council 2001, paragraph 416 forward. Also, Farah and Braun 2007.
- 53 Farah and Braun 2007. In November 2010 Bout was extradited to the United States to stand trial for allegedly planning to sell weapons to a designated terrorist organization. See McGreal 2010.
- 54 UN Security Council 2000b.
- 55 Ruprah email to author for Farah and Braun 2007, p. 159.
- 56 Farah and Braun 2007, p. 159; UN Security Council 2000a, paras. 142–143.
- 57 UN Security Council 2001, para. 349.
- 58 Farah and Braun 2007, p. 162.
- 59 For a complete look at documented flights of Minin, see UN Security Council 2000b, paras. 204–211.
- 60 Chuckie was convicted in a U.S. federal court for torture during his tenure in the Anti-Terrorist Unit. Although the crime occurred in Liberia, the court ruled it had jurisdiction because Chuckie is a U.S. citizen.
- 61 For details on Minin's activities and his ties to Chuckie Taylor, see International Consortium of Investigative Journalists 2003, pp. 134–142. Taylor was also arrested in the United States and, in a groundbreaking case, convicted on October 30, 2008 of torture and other crimes. He was sentenced to 97 years in prison. See Dickson 2009.
- 62 Coalition for International Justice 2005.
- 63 Global Witness 2002, p. 8; Truth and Reconciliation Commission 2009.
- 64 Truth and Reconciliation Commission 2009, p. 19
- 65 Reno 1999, p. 98.
- 66 Gberie 2003.
- 67 For a detailed look at the relationship between the RUF and Taylor, particularly in the diamond trade, see Farah 2004.
- 68 This description of the diamond for weapons trade is drawn largely from the author's field work in Sierra Leone and Liberia as a correspondent for the Washington Post, and the investigations contained in Farah 2004.
- 69 GDA Antwerpen, Antwerpen GDA OB. Noordersingel, 25–27, 2140 Antwerpen, following PV nr: 112405, dated November 4, 2002, in implementation of Public Prosecutor File 1/2002 Subsection General examining magistrate Antwerp. (Unofficial translation by Global Witness.)
- 70 This description of the Nassour network is drawn from the following accounts, in addition to the author's above work: Simpson 2004; BBC Three 2003; Belgian Police dossier titled "Public Prosecutor File 1/2002, "Case LIBI," Federal Police, GDA Antwerp, Diamond Section, obtained by author.
- 71 Farah 2004.
- 72 BBC Three 2003.
- 73 This conclusion, written by the author in the Washington Post in November 2001, has been widely contested by the U.S. Central Intelligence Agency but has been verified by European intelligence investigations, nongovernmental organizations such as Global Witness, and other media, including the BBC of the United Kingdom and NBC of the United States. In view of their roles in trading blood diamonds for weapons, Bah, Nassour, Osailly, and Bout were all placed on the UN travel ban list and UN asset seizure list. See UN Security Council 2005b, and UN Security Council 2005a. Osailly was arrested in Belgium on April 12, 2002 and convicted of illicit diamond dealing and spent two years in prison. Nassour was convicted in absentia, but lives in Beirut, Lebanon and has not been apprehended.
- 74 Document obtained by author from senior Liberian official, first quoted in Farrah 2004, p. 76.
- 75 For full details, see the unofficial translation of Public Prosecutor File 1/2002–Subsection General Examining Magistrate, Antwerpen, Prosecutor's File Number AN.27.97.1393/01; Farah 2004, pp. 71–99.
- 76 Farah 2004, p. 78.
- 77 Farah 2004, pp. 80–82. Author is in possession of emails related to this case.
- 78 Farah 2002b.
- 79 There is little academic literature on the overlapping criminal structures in the Petén or in Guatemala.

- However, there are several important pieces in the international press, including Tobar 2008, p. A01; Fieser 2009; and Burnett 2006.
- 80 Preston 1996.
- 81 Schneider 2006.
- 82 Commission for Historical Clarification 1999.
- 83 BBC News 2010.
- 84 Associated Press 2010.
- 85 United Nations 2007.
- 86 Hamilton 2005.
- 87 Much of the legal logging is now controlled by communities because the central government does not have the capacity to control the land or the sale of the logs. Through international nongovernmental organizations, the communities can have their timber certified as eco-friendly, provided they do not log more than one tree per acre every 30 years. Of the roughly \$4 million the communities earned in 2005, they invested \$150,000 to prevent forest fires and land invasions. See Rosenberg 2006.
- 88 Clark 2000.
- 89 "Número de Víctimas y Tasas de Homicidio en Guatemala (1999–2006)," Policía Nacional Civil de Guatemala. http://www.ocavi.com/docs_files/file_385.pdf.
- 90 Homicide rates provided by Erik Alda of the World Bank.
- 91 Fieser 2009.
- 92 Rosenberg 2006. See also Stein 2006 and Xinhua 2009. One senior Guatemalan official estimated there were some 800 airstrips in operation, many of them only used once or twice before being abandoned.
- 93 Hamilton 2005.
- 94 Economist 1993.
- 95 Tobar 2008.
- 96 Author email exchange with Yuri Melini, March 25, 2010.
- 97 Melini email; Tobar 2008.
- 98 Burnett 2006.
- 99 Tobar 2008.
- 100 See Braun 2006.
- 101 Fraser 2010.
- 102 Burnett 2006, quoting Virgil Stoltzfus.
- 103 See Tobar 2008; Schaefer, Bahney, and Riley 2009; Brands 2009; and La Prensa 2008.
- 104 For a study of some of the worst abuses committed by the Kaibiles, see Amnesty International 2002.
- 105 For details of the formation of Los Zetas, see Grayson 2008 and Corchado 2006.
- 106 The group reportedly derived its name from its original leader, Arturo Guzman Decenas, whose radio code name was Z-1. Zeta is the Spanish word for the letter Z. Others were assigned codenames based on their standing in the organization's hierarchy. The lower the number the more important the member. See Logan 2009.
- 107 See Logan 2009.
- 108 Brands 2009.
- 109 For the most comprehensive look at the overlap among the Kaibiles, the military, and drug trafficking with Los Zetas, see Smyth 2005.
- 110 Global Insight 2008; Hernandez 2008.
- 111 Farah 2010.
- 112 Forero 2010, p. A09.
- 113 Global Bioenergy Industry News 2008. The 2005 production figure was taken from Mingorance 2006, p. 12.
- 114 Mingorance 2006, p. 40.
- 115 Mingorance 2006, p. 24.
- 116 Revista Semana 2006.
- 117 Forero 2005.
- 118 Hernán Cortés, quoted in Leech 2009.
- 119 Balch and Carroll 2007.
- 120 For a more comprehensive look at how the paramilitary groups have operated in the Colombian war, see Farah 2007.
- 121 For an overview of the scandal, see Moloney and Lapper 2007. Senior military commanders were also implicated in the scandal. See Bright 2007 and Center for International Policy 2008.
- 122 Farah and Braun 2007.
- 123 Organization of American States 2003.
- 124 World Bank 2010, pp. 2, 5.
- 125 Reno 1999.
- 126 The Federation of American Scientists lists 385 para-state actors across the globe, available at <http://www.fas.org/irp/world/para/index.html>.
- 127 Rabasa and others 2007.
- 128 Rabasa and others 2007, p. 30.

Logging can generate localized conflict over a range of issues. These include failure by companies and government to recognize and negotiate with local communities over rights to land and resources, as well as conservation priorities, pollution, and shares of logging revenue and other benefits.¹ This conflict often becomes violent, as seen in countless countries.²

From Amazonian Peru to Eastern Madagascar, government forestry offices have been burned down, allegedly in protest at government attempts to halt illegal logging.³ This violence undermines the rule of law and may aggravate grievance among victims, which can be enflamed into violence against the state.

This chapter focuses on a subset of violent conflict that has the most profound effect on peace, stability, and development—what is increasingly recognized as *conflict timber*, that is, timber that has “contributed to the outbreak, escalation or continuation of armed conflict.”⁴ Adopting the *stressors–capabilities–expectations* framework that the World Bank uses in its *World Development Report 2011* on conflict, security, and development, the chapter aims to provide an understanding of the context in which the forestry sector fuels conflict. It examines in particular the stresses related to the financial flows from the forestry sector that increase the risk of armed conflict for a given country; the characteristics of such fragile states; and the reforms intended to improve the capabilities of countries to respond to these stresses, as well as to protect forests and forest livelihoods.

Much has been written about the link between natural resources and conflict. The data overall suggest that the ratio of primary exports to gross domestic product (GDP) is strongly correlated with the onset of civil war.⁵ The data also suggest that a heavy reliance on primary exports—especially “lootable” commodities like forests, which do not require high technology for extraction—fuel such conflicts.⁶ More specifically, De Jong and colleagues⁷ state that “forests and extreme conflict show a strong relationship. Three-quarters of Asian forests, two-thirds of African forests and one-third of Latin American forests have been affected by violent conflict... [C]ountries affected by violent conflict are home to more than 40 percent of the world’s tropical forest. Indeed, the last remaining tropical forests are located in areas that over the past two decades have been subject to violent conflict.”

A review for the U.S. Agency for International Development concluded that conflict timber is facilitated by inadequate financial controls, ambiguous and/or unrecognized land tenure, and the use of state security

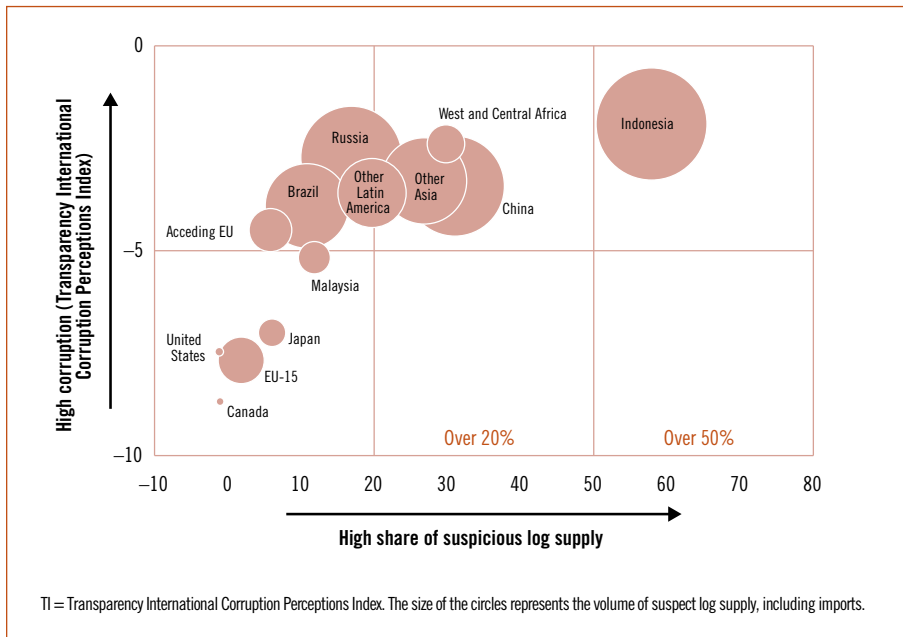
* Contact information: Natural Capital Advisors LLC, 2102-1238 Melville Street, Vancouver BC Canada V6E 4N2; e-mail: art@biodiversityneutral.org

forces to protect logging operators. Nonetheless, belligerents appear to prefer exploiting other commodities before timber.⁸ Timber's characteristics—its bulk, low value for weight (relative to other more lootable commodities such as precious metals or rough diamonds), and relatively high technical and financial extraction costs—make it difficult to smuggle. However, if belligerents can control territory rich in forests and the transportation routes necessary to export the timber, timber exploitation can fuel conflict, as seen most notably in Liberia under Charles Taylor.

Closer analysis of the general trends across countries and conflicts, however, reveals a complicated pattern. Outbreak of conflict shows a weak association with increased value of timber exports, and since the end of the Cold War, the more forest area, the longer the armed conflict, especially if belligerents have other natural resources to exploit.⁹ When Rustad and colleagues examined the data on the basis of where conflicts actually occur (instead of aggregated at the country level), forested areas closer to the ocean (and therefore with access to marine transport) tended to be associated with longer armed conflicts. But this trend was driven by conflict in just a few countries: Bangladesh, Myanmar, Papua New Guinea, and Senegal. Thus Rustad and colleagues concluded that, while forests clearly fuel conflict in some countries, it may be too soon to make any generalizations about the role of forests in armed conflict.

Although the effects of timber on conflict are complex, there are clear trends in the way that the governance of natural resources, including timber, affects economic growth, peace, and stability. For resource-dependent countries, the economies of democracies grow faster than those of autocracies, provided that sufficient restraint on political power exists.¹⁰ But where these political checks and balances (such as a free press and independent judiciary) are absent, democracies actually lag autocracies in economic growth, an important point because growth itself has a strong role in reducing the risk of conflict.¹¹ Hence the significance, and the need, for understanding the relationship between illegal logging and weak governance (figure 3.1), and tackling the vicious circle of corruption and mismanagement.

FIGURE 3.1: THE RELATIONSHIP BETWEEN WEAK GOVERNANCE AND ILLEGAL LOGGING



Source: Seneca Creek Association. 2004. “Illegal” Logging and Global Wood Markets: The Competitive Impacts on the U.S. Wood Products Industry. American Forest & Paper Association.

This chapter uses the civil wars in Liberia (1989–2003) and their spillovers to Sierra Leone, Guinea, and Côte d’Ivoire to examine the forestry-generated internal and external stresses that increased the risk of conflict in the region. To see Liberia into a larger framework and so enable more generalizable conclusions about the mechanistic way forestry influences conflict, in the first section the chapter presents a brief, generic description of the forestry sector and the opportunities the sector presents for criminal enterprise. It then examines the major stresses that influence the risk of conflict. It highlights, with examples, how:

- Forestry fuels corruption, which undermines economic development and thus increases the risk of conflict.
- Revenue from forestry is used directly to fuel conflict.
- Operators in the forestry sector participate in conflict by, for example, trafficking weapons.
- The security forces of logging operations participate directly in conflict.
- The forestry sector facilitates money laundering and other financial crimes.

In the next section, the chapter examines the capabilities of countries to deal with these stresses. Where capability such as enforcement is weak, the risk of conflict will rise. An assessment of these capability issues is the first step in developing a strategy for comprehensive reform to reduce the likelihood that timber will undermine peace, security, and economic growth. Crucially, reform needs to be based on good governance, so as to reduce the risk that forestry will fuel subsequent conflict.

In the penultimate section, the chapter examines the expectations surrounding the forestry sector in conflict-prone countries and how they can be managed to increase countries' capabilities, and so decrease their vulnerability. Good expectations management is crucial in developing the constituency for reform and in building the realization that "business as usual," which contributed to conflict, will no longer be tolerated.

FORESTRY AND CRIMINAL OPPORTUNITIES

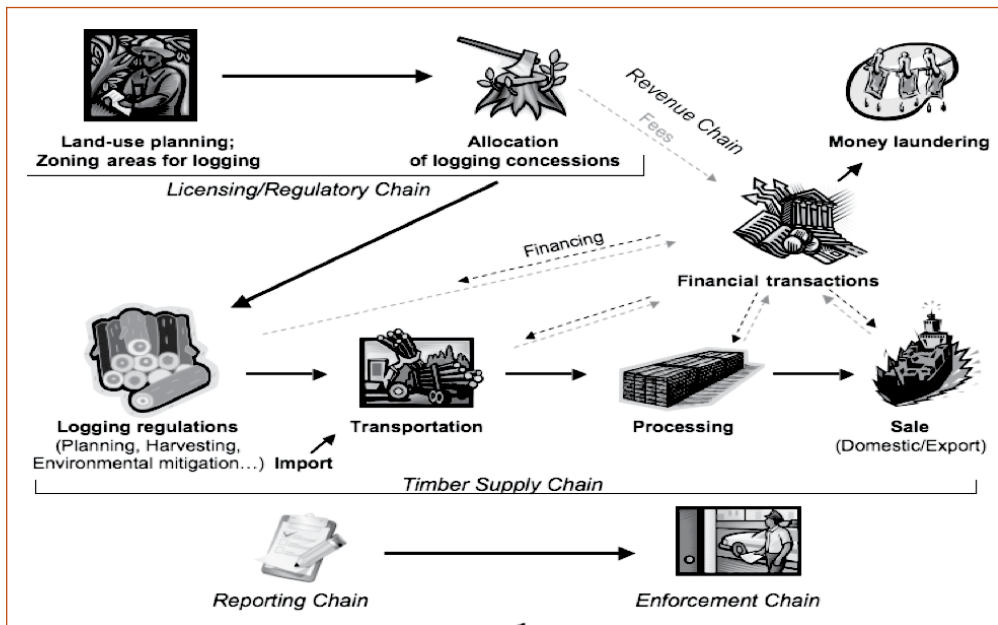
The forestry sector has five major chains (figure 3.2). The first is the *licensing/regulatory chain*, which makes the rules (codified in laws and regulations). It is also where regulators allocate the right to log.

The next is the *timber supply chain*, which includes the steps from logging through transport, processing, and sale, and which overlaps broadly with the *revenue chain*, where fees and taxes are collected for the government, and where operators receive financing.

Underlying the sector are two chains. In the *reporting chain*, loggers and regulators document operations and civil society provides oversight; in the *enforcement chain*, when rules are violated, operators are punished through administrative penalties or the courts. Transparency is necessary for accountability.

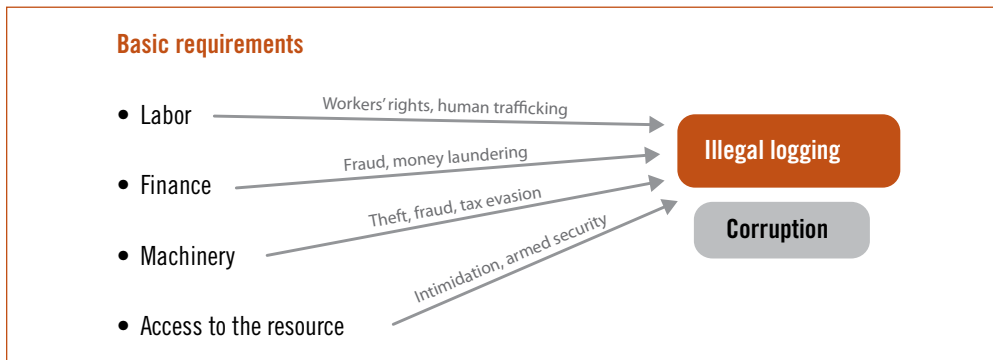
Criminal opportunities in forestry are plentiful, especially through illegal logging¹² facilitated by corruption (that is, the misuse of entrusted power for private gain). Operators may bribe government actors, who may themselves, conversely, extort operators to allow them to conduct otherwise legal logging, processing, and sales. Indeed, even in pursuit of the most basic requirements for logging, criminal opportunities are multiple, because logging requires labor, finance, and machinery – and of course access to trees (figure 3.3).

FIGURE 3.2: A GENERIC REPRESENTATION OF THE FORESTRY SECTOR AND ITS CONSTITUENT CHAINS



Source: Transparency International. 2009. Manual: An analysis of corruption in the forestry sector.

FIGURE 3.3: A GENERIC REPRESENTATION OF THE FOUR MOST IMPORTANT FACTORS INVOLVED IN FORESTRY, AND A SAMPLE OF THE CRIMINAL OPPORTUNITIES



Criminal opportunities arise in the labor arena because logging companies may prefer to use an outside workforce that they believe is more easily controlled and not distracted by local social obligations and labor requirements, such as farming. Recruiting laborers may violate immigration laws and may entail smuggling or trafficking of skilled or unskilled laborers for forest work. Likewise, unscrupulous employers may violate workers' rights, denying them fair wages and a safe work site.

Operators may, when securing finance, defraud investors, and illegal operators have to launder the profits of crime, often through the legitimate global banking network. Also, operators may buy looted machinery, or evade tax by underdeclaring the value of imported equipment.

In obtaining access to the resource (in this case, fiber from trees), operators may use their armed security forces to intimidate locals into allowing logging in their community forests. Moreover, illegal activity tends to attract the attention of organized crime, such as human, drugs, and weapons traffickers.¹³

The structure of the sector allows unscrupulous operators many entry points to crime and its proceeds. While timber may not be all belligerents' commodity of choice, where the conditions allow for profitable exploitation, logging—with criminal networks—can be used to consolidate control over the forest estate, thus generating revenue to prolong, or even enlarge, the armed conflict. The following section provides examples of these criminal activities, mainly in Liberia.

STRESSES

Liberia is the most extreme case of timber fueling armed conflict, for several reasons.¹⁴ First, unlike many of its neighbors, it is forest rich, with half the remaining tropical rain forests in West Africa, one of the world's 34 "biodiversity hotspots."¹⁵ Second, although transportation within the country is extremely difficult due to lack of infrastructure (few roads and bridges, hardly any railroads) and a lack of navigable rivers (due to abundant rapids), the country is relatively small and has three ports that can export timber.

Third, markets for Liberian wood existed even during the conflict. (France was an important purchaser throughout the conflict, as was neighboring Côte d'Ivoire.)¹⁶ Fourth (as described later in this section), those controlling the forest territory were able to provide sufficient security for loggers, who were then willing to invest and operate. As a comparison, the Democratic Republic of Congo (which, with half the forest in all Africa, has much more forest and is a biodiversity hotspot itself) was unable to provide this security during the conflict. Hauling costs were extreme, and timber did not appear to be a major factor in fueling war.¹⁷

The Liberian context

The Republic of Liberia was founded in 1822 by freed slaves from the United States. The descendants of these "Americo-Liberians" (who never constituted more than 3 percent of the population) governed the country exclusively for almost 160 years, until the bloody coup of 1980, launched by a group of indigenous soldiers led by Sergeant Samuel Doe. The coup was widely seen as a culmination of grievances over inequity and discrimination against the indigenous population. Poverty and a lack of accountable government undermined peace and security—in fact, the term "growth without development" was first coined to describe Liberia.¹⁸

Doe's government, however, rapidly became a kleptocracy and deeply unpopular. With the end of the Cold War, and the loss of critical support from the United States, Doe's administration ceased to function. Doe survived a coup in the mid-1980s but was killed when civil war broke out in 1989, when Charles Taylor and his National Patriotic Front of Liberia (NPFL) invaded Liberia from Côte d'Ivoire.

Since then Liberia has experienced repeated outbreaks of violence, even after a cease-fire in 1996 that led to the election of Taylor as president. Recurrent conflict spread throughout the region, engulfing Sierra Leone, Côte d'Ivoire, and parts of Guinea, leaving hundreds of thousands dead or displaced, and many more as victims of serious violations of human rights.¹⁹ Taylor was driven from power when the rebel groups Liberians United for Reconciliation and Democracy (LURD) and later the Movement for Democracy in Liberia (MODEL) invaded from Guinea and Côte d'Ivoire, respectively. A relative peace was finally achieved in 2003, when as part of a negotiated settlement, Taylor fled to exile in Nigeria.²⁰

The conflict falls into two periods. In the first civil war of 1989–96 the insurgent Taylor and his NPFL controlled most of the country's territory, especially the forests outside the capital, Monrovia. In 1997–2003 Taylor, as president, controlled the entire state apparatus. In both periods timber played a significant role in his desire and ability to control territory and the means to conduct war. Nonetheless, only in 2003 could the United Nations (UN) Security Council overcome the objections of France and China and impose sanctions on the import of forest products from Liberia.²¹ By this time most of the Liberian economy had collapsed from a lack of security, looting, and the withdrawal of all but a few risk-tolerant investors. Given the collapse, the forestry sector accounted for 25 percent of GDP and half of export earnings.²²

In 1992 the UN Security Council had sanctioned all weapons shipments to Liberia.²³ But despite the embargo the war spilled over to Sierra Leone, which was itself sanctioned (initially under arms and oil-import prohibitions, from 1997).²⁴ In 2000 the Security Council sanctioned the import of rough diamonds from Sierra Leone²⁵ and, in 2001, from Liberia, in an attempt to stem the flow of money to the belligerents and ultimately

quell the violence.²⁶ The Security Council then sanctioned the travel of individuals thought to be a threat to regional peace and security.²⁷ In 2004 sanctions were increased to freeze the assets of Charles Taylor, his family, and close associates, including individuals and companies associated with arms trafficking. The intent was to stop them “from using misappropriated funds and property to interfere in the restoration of peace and stability in Liberia and the sub-region.”²⁸

A year earlier in 2003 a Comprehensive Peace Agreement had been signed between Taylor’s government and the two rebel forces. As part of the agreement, a National Transitional Government of Liberia was formed in which the government ministries were divided among the three warring factions. MODEL was given both the Ministry of Mines and the Forestry Development Authority, the government institution managing forests in Liberia.

As part of the postconflict engagement, in December 2003 the U.S. embassy in Monrovia arranged a workshop for local stakeholders to develop a “roadmap” to meet the conditions to lift the UN timber sanctions, and more generally, to produce a plan for the comprehensive reform of the forestry sector. The UN Security Council insisted—to minimize the risk that forestry would fuel a resumption of conflict—on three general conditions before timber sanctions could be lifted: security should be established throughout Liberia; money from logging does not fund conflict; and the government must manage the forest to ensure its legitimate use.²⁹

Although forestry was not initially on the agenda at the first donors’ conference on Liberia, held at the UN in New York in 2004, the transitional government and the U.S. government established the Liberia Forest Initiative to coordinate donor efforts and to build transparency, sustainability, and good governance.³⁰ Other Liberian stakeholders and international partners quickly joined, including the World Bank, the Food and Agriculture Organization, the International Union for Conservation of Nature and Natural Resources, the European Commission, the Center for International Forestry Research, Conservation International, and Fauna & Flora International.

In 2005 the transitional government impaneled a Forest Concession Review (FCR) Committee³¹ that included civil society and members of the Liberia Forest Initiative, in particular the U.S. Forest Service.³² It was understood that the UN Security Council believed that, to prevent a return to “business as usual,” Liberia would need to review the forestry sector and its role in the conflict, including the behavior of logging operators. Moreover, from a sequencing perspective, the information obtained by the review would assist in laying the institutional foundations and building the stakeholder consensus necessary to support further reforms. The information was also available to complement the work of other peacebuilding efforts, such as the Liberian Truth and Reconciliation Commission (TRC), which incorporated much of the FCR’s findings into its final report³³ on the economic crimes linked to the Liberian conflict.

The FCR revealed widespread violations of laws and regulations: “The forest sector typically is heavily exploited during times of civil disturbance as a source of revenue to fuel conflict.”³⁴ It also showed that the logging companies and government often worked closely. In particular it found that:

- Those in authority allowed illegal logging in exchange for bribes and other favors, including arms trafficking in violation of UN Security Council sanctions.
- Logging companies paid millions of dollars directly to government officials.
- In furtherance of these crimes, logging companies and the authorities conspired to evade taxes.
- These corrupt payments facilitated money laundering.
- The security forces paid by logging companies were composed of former insurgent leaders who committed gross human rights violations and war crimes.

The rest of this section examines these findings and the role each played in the Liberian conflict. These factors—or stressors—show up in similar contexts elsewhere, and in all these cases, unscrupulous actors in the forestry sector, with other criminal elements, serve to undermine peace, security, and development.

Stressor 1: Corruption

The first stressor is simple—corruption, which undermines the ability to manage the forestry sector in a sustainable way that reduces the risk of conflict. In Liberia the largest logging company at the start of the 21st century, the Oriental Timber Corporation (OTC)³⁵ and its associates, deposited at least \$8 million directly in the personal bank account of Charles Taylor. Figures 3.4, 3.5, and 3.6 present some paperwork relating to a sample deposit of approximately \$2 million in Charles Taylor’s personal account, for which Natura (an associate of OTC) then received tax credit. Figure 3.4 depicts the bank deposit slip; figure 3.5 documents that the deposit was, indeed, reflected in Taylor’s monthly bank statement; and figure 3.6 shows the tax credit that Natura later received from the Liberian Ministry of Finance.

The president of OTC, Guus Kouwenhoven,³⁶ testified that the demands for payment came mainly from Charles Taylor:

“If you make a lot of money doing business in Liberia, you have to share your profits. You cannot refuse...The president is like the top God. If it turns out that he needs money at the end of the year to pay his civil servants he just calls at various businesses and asks them for an advance on next year’s tax...This is not a ‘Kouwenhoven system’—everyone is involved in it.”³⁷

“When I was at home, there would be a whole bunch of people waiting at my door who had problems...senators, ministers... Every day there were 20 or 30... They were all paid poorly and they thought that they had to live according to a certain standard.

“In order to get working permits for foreign employees I had to pay \$75 to the Ministry of Labor and \$75 to [the Minister] himself...

“I did have contact with Taylor about OTC matters...If he needed anything he would call me...Most of the time it had to do with financial requests. After we had concluded the OTC agreements...we were asked to make an advance payment of \$5,000,000 for future taxes... Apart from that he asked us to send a number of tractors to his farm, or he said that he wanted

a road, that he needed electricity and he would ask me if I could advance the money. He also simply asked for payments.

FIGURE 3.4: BANK STATEMENT FOR CHARLES TAYLOR SHOWING DEPOSIT BY NATURA HOLDIN

THE LIBERIAN BANK FOR DEVELOPMENT & INVESTMENT 2065
P. O. BOX 547, MONROVIA, LIBERIA

DEBIT TICKET DATE: 7/19/00

DEBIT: RAD-21112

OFFSET (CREDIT): CHARLES G. TAYLOR
00-201-32851-01

DETAILS: INVOICE, RAD REF # (0001991535601) 140 COUN. 820
NATURA HOLDING & PTE LTD AS PER CHQ W/DT 7/19/00
ONE MILLION NINE HUND - NINETY NINE THOUSAND NINE HUND SEVENTY FIVE DOLLARS

AMOUNT IN WORDS: SEVENTY FIVE

AMOUNT IN FIGURES: US\$1,991,975.00

MAKER: [Signature] CHECKER: [Signature] OFFICER: [Signature]

ORIGINAL

Source: UN Panel of Experts Report 2007. UN Security Council S/2007/340, Annex III-V.

FIGURE 3.5: STATEMENT FROM TAYLOR'S PERSONAL BANK ACCOUNT SHOWING THE DEPOSIT

Statement of Account
LIBERIAN BANK FOR DEVELOPMENT AND INVESTMENT
HEAD OFFICE BRANCH (US DOLLAR)
Ashmun & Randall Sts.
P. O. Box 547
Monrovia, Liberia

Per Customer: Call us at 227156 or Fax: Bank Sort Code: 000

00.201-32851-01 (32851-01)
TAYLOR, CHARLES G.
US DOLLAR
CHECKING ACCOUNTS - PERSONAL

CHARLES G. TAYLOR
CONGO TOWN
MONROVIA, LIBERIA

THIS STATEMENT COVERS 01 Jul 2000 THROUGH 31 Jul 2000

Trx Date	TxRef	Details	Chq No	Value	Date	Debits	Credits	Balance	Payee
01	0000	BALANCE B/F					2,274.32	2,274.32	
11	19377	COMM ON TOD				-2,000.00		274.32	
11	19389	T6 CHECK CASHED	033532			-100,000.00		-99,725.68	
11	19389	PER DEBIT CHARGE				-1.10		-99,726.78	
17	20571	T2 CHECK CASHED	033638			-250,000.00		-349,726.78	
17	20571	PER DEBIT CHARGE				-1.10		-349,727.88	
18	20858	RAD INO C.G.T. B/O NATURA HOL					1,991,975.00	1,650,247.12	

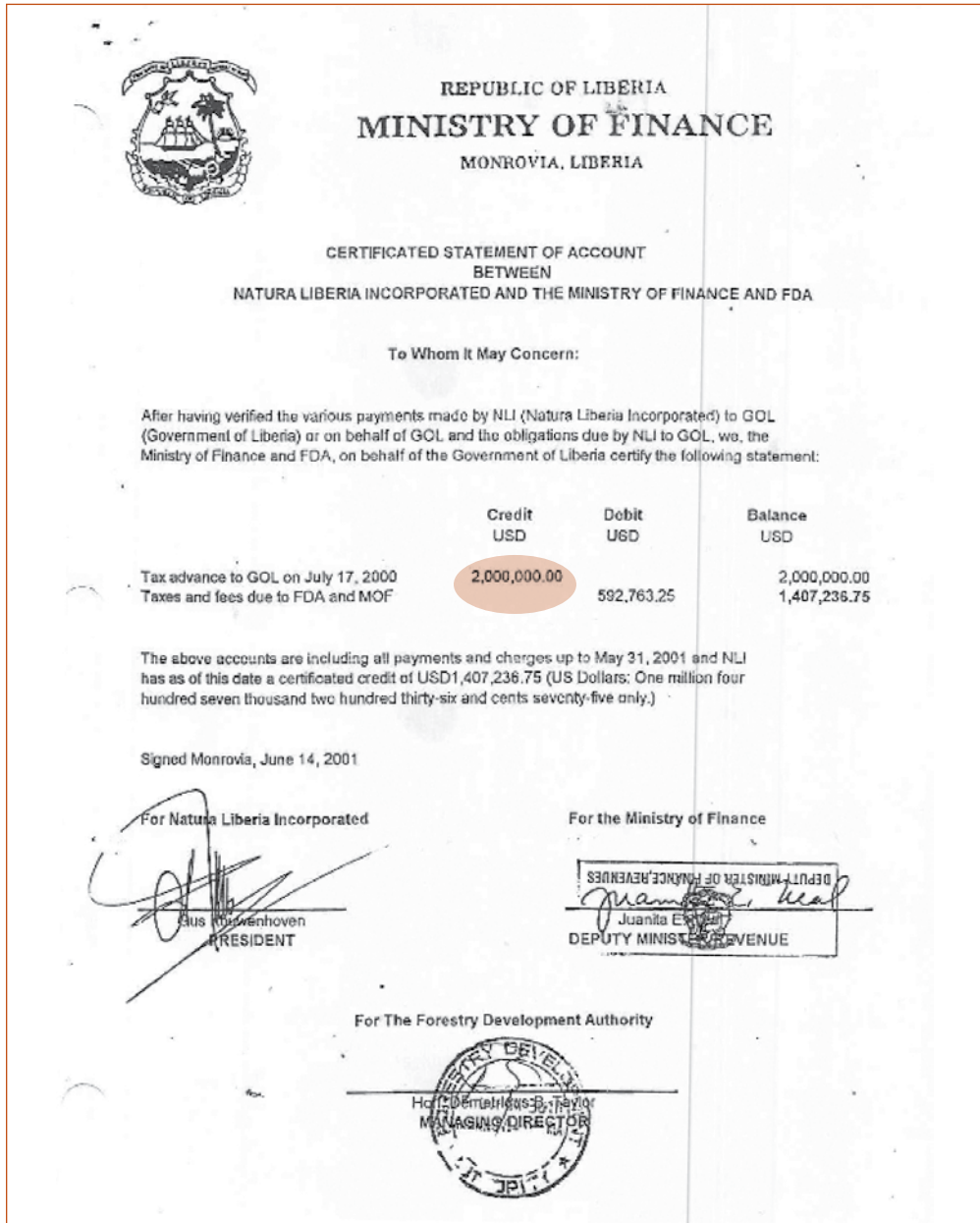
Source: UN Panel of Experts Report 2007. UN Security Council S/2007/340, Annex III-V.

"He would receive 50% of royalties I received from OTC.

"...we are paying a minimum royalty of 500,000 USD per year whether we make the 50,000 or not....

"It was common use in Liberia that the leading political party was the owner of a concession."³⁸

FIGURE 3.6: SUBSEQUENT TAX CREDIT TO NATURA



Source: UN Panel of Experts Report 2007. UN Security Council S/2007/340, Annex III-V.

Such bribery undermined good forest management. As one illustration, at the end of the war in 2003 the area claimed by logging companies exceeded the entire area of forests in Liberia 2.5 times. The FCR described the allocation process:

“During 1998 and 1999, after former President Charles Taylor took office, there was another re-allocation process in which Taylor called concession holders to his office and dictated where they would work or not work. The objective was to re-align forest lands into several large concessions. That “Mega-Concession” policy allowed the inner circle of the country’s leadership to hand out concession rights to favored political cronies, militia leaders, and arms dealers.”

Representatives of the Liberia Agricultural Logging and Mining Corporation reported that the Mohammed Group of Companies “took over our concession area forcibly and that when we objected, we were told by Mohammed Salamé³⁹ that we should go and see Charles Taylor.” When the Garr clan in Sanniquellie, Mah District “tried to stop the company from harvesting their forest, the company brought in fighters from the government’s Anti-Terrorist Unit and beat up the natives.”⁴⁰ Taylor apparently “colluded to appoint his son, Charles “Chuckie” Taylor, Jr., chairman of another foreign-owned firm, United Logging Company.”⁴¹ As another example, a representative of the Mozara Timber Company, who is a Mandingo,⁴² alleged that “Bob Taylor [Charles Taylor’s brother, who was Managing Director of the Forestry Development Authority] prevented me from operating because Mr. Taylor said that if I was permitted to operate, the proceeds from the logging would be used to support the [predominantly Mandingo] LURD forces.”⁴³

Thus Charles Taylor, as Doe before him, used the forestry sector as an opportunity to reward loyalists and useful associates with lucrative logging concessions. When OTC was formed, he referred in public to the company as his personal “pepper bush” (a source of cash, akin to the “goose that laid the golden egg”) and made it clear that no one was to interfere with its operations.⁴⁴

This use of natural assets for personal patronage, rather than economic development and poverty reduction, is repeated in other forested conflict zones, particularly when the forests are far from the capital. Examples include the military government in Myanmar, whose members benefit personally from deals with Thai loggers, putschists in Madagascar, the Cambodian elite,⁴⁵ and even military forces in East Timor,⁴⁶ Aceh,⁴⁷ or Papua.⁴⁸ The government of the Democratic Republic of Congo is alleged to have compensated Zimbabwe for its military assistance by providing concessions covering 34 million hectares in a joint venture called the Société Congolaise d’Exploitation du Bois.⁴⁹

The history of the forestry concession to the Vamply logging company in Liberia is illustrative of how multiple, overlapping claims are spawned. Over 30 years the government gave the concession to at least three different operators without extinguishing the claims of previous operators. Moreover, the pattern of allocation reflects patronage to loyal allies and arms-for-timber deals, rather than any legally recognized system.

The FCR reported that in 1972 Vamply was awarded a 30-year concession in Liberia. In 1977 Vamply made a management agreement with the Liberia Timber and Plywood Company to harvest the concession. In 1984

an Israeli firm, Yona International Ltd., made a second management agreement with Liberia Timber and Plywood to operate a joint venture that became the largest logging concession in West Africa.⁵⁰ This venture was financed in part by the International Finance Corporation (IFC), in exchange for assurances that the Doe government gave in 1987 that the concession rights would revert to the IFC if the joint venture defaulted.

Instead of paying taxes and fees, Yona helped finance construction of a new Ministry of Defense building in Monrovia for the government.⁵¹ Doe allegedly received Israeli help to arm and train his paramilitary Executive Mansion Guard and special Anti-Terrorist Unit soldiers at the concession's site.⁵² The logging company also allegedly maintained local infrastructure of strategic concern such as communications facilities that could be used to coordinate paramilitary operations. In 1992 the transitional government in Liberia demanded payment of \$12.5 million in taxes, and when Liberia Timber and Plywood (or any of the other partners) did not pay, the government canceled the contract in 1995, despite protests by the IFC that it had been unable to exercise its rights. In 1996 the government reallocated the concession to Carlton Resources Incorporated, even though the concession area was under control of Taylor's NPFL. When Taylor became president of Liberia, Carlton Resources was told to relocate as its concession was to be given to other concession holders, including OTC and the Inland Logging Company, directed by Oscar Cooper, a former NPFL insurgent leader.⁵³

Such histories are not unique. In Cambodia after the war, government ministers secretly awarded some 30–40 logging concessions to domestic and foreign-owned companies on more than 7 million hectares, 39 percent of Cambodia's land area.⁵⁴ At the end of the conflict in the Democratic Republic of Congo, many of the concessions had at least two operators claiming ownership, many of which were speculators, unable even to visit the concessions at the time of allocation because of war.⁵⁵

Stressor 2: Logging revenue funds war

The second forestry-related stressor is that revenue from logging fuels conflict. In the 1990s conflict timber in Liberia, Cambodia, and Myanmar likely exceeded \$500 million a year.⁵⁶ In Liberia extortion, looting, and tax evasion were used.

Prior to becoming president, Charles Taylor partly funded his rebel administration—the bogus National Patriotic Reconstruction Assembly Government (NPRAG), though unrecognized by any country—through the extortion of commercial operations like forestry.⁵⁷ His administration demanded logging companies to contribute directly to salary payments for port managers, to “National Security Administration” expenses, and to generate electricity.⁵⁸

Likewise, belligerents profited by looting logging companies. Although only 15 percent of logging companies have submitted reports of losses from looting in Liberia, the claims total more than \$133 million.⁵⁹ In one example in May 1998 a former NPFL commander, Cocoo Dennis, accompanied by 45 NPFL ex-combatants, allegedly seized \$355,000 of logging equipment from B & Sons Logging Corporation.⁶⁰ OTC security forces allegedly looted 5,000 cubic meters of logs from EJ & J Investment Corporation. Charles (Chuckie) Taylor, Jr.,⁶¹ with the Anti-Terrorist Unit that he led, looted an additional \$1 million in logging equipment.⁶² (In the

Democratic Republic of Congo, invading military units from Rwanda and Uganda apparently flew looted wood out on airplanes.)

In the FCR report, forensic accounting concluded that, on the basis of records from the Forestry Development Authority and the Central Bank of Liberia, logging companies were more than \$64 million in tax arrears⁶³ (appendix 1)—that is, less than 16 percent of the Forestry Development Authority’s tax assessments were paid. Two operators (sister companies, the Mohammed Group of Companies and BIN Liberia Inc.) paid less than 1 percent of total revenue in tax (an average of only \$5,800 a month on revenue exceeding \$1 million a month).⁶⁴

The arrears are likely much worse. According to reports from importing countries, the trade from Liberia was at least three to four times that reported by the Liberian government (table 3.1). This underreporting is consistent with transfer pricing (where companies undervalue reported exports to avoid paying taxes in the exporting country) or document fraud.

TABLE 3.1: TIMBER EXPORTS FROM LIBERIA (\$ MILLION)

YEAR	FORESTRY DEVELOPMENT AUTHORITY	CENTRAL BANK OF LIBERIA	FOOD AND AGRICULTURE ORGANIZATION	INTERNATIONAL TROPICAL TIMBER ORGANIZATION
1999	22.6	n.a.	24.5	23.5
2000	67.5	59.5	213.9	213.9
2001	79.9	60.3	228.3	239.5
2002	n.a.	n.a.	333.5	282.5

Note: Sawwood and roundwood combined.

n.a. = report not available.

Source: Blundell 2008.

But even these official reports by the importing countries likely underestimate the amount of tax loss to Liberia during the war. While exports from Liberia reportedly declined during the outbreaks of extreme violence (table 3.2), much of the production was undoubtedly smuggled, especially through Côte d’Ivoire, where a large number of sawmills drove demand for logs. In the 1980s before the Liberian civil wars, Côte d’Ivoire reported exports of about \$250 million a year, but during the first civil war (1989–96) they jumped to \$350 million a year, falling back to \$220 million in 2000.⁶⁵ In Liberia after the first civil war ended, timber exports rose again.

Much of the missing taxes were used to directly fuel the armed conflict. In 2003 Charles Taylor admitted to the press that revenue from logging was used to purchase arms in violation of UN arms sanctions.⁶⁶ More recently, on the stand in his trial for war crimes in Sierra Leone, he admitted to using payments from OTC to fund “covert accounts” to buy weapons, as a means of evading UN arms sanctions.⁶⁷

TABLE 3.2: REPORTED TIMBER EXPORTS FROM LIBERIA

YEAR	\$ MILLION	YEAR	\$ MILLION
1988	93.7	1996	15.4
1989	78.3	1997	7.7
1990	152.1	1998	13.0
1991	53.6	1999	24.5
1992	69.9	2000	213.9
1993	21.7	2001	228.3
1994	4.1	2002	333.5
1995	8.1	2003	178.1

Note: The first civil war period is listed in bold, as is the period of extreme armed conflict in 2003.

Source: FAOSTAT.

Cambodia

Cambodia's history is slightly different from Liberia's. Decades of instability kept industrial loggers out of its forests. But with peace, the high value of its forests attracted a timber industry that had been active for more than 40 years in Asia, especially in Indonesia, Malaysia, and the Philippines. During the 1990s, tens of millions of cubic meters were extracted from Cambodia, and approximately 10 percent of the forest, more than 1 million hectares, was deforested. The logging operations were "not even close to sustainable."⁶⁸

In 1992 the government activated a moratorium on log exports, which was supported by a UN Security Council resolution.⁶⁹ The Security Council urged importing countries to cooperate, and asked the UN mission in Cambodia to take measures to implement the moratorium.

Before the ban, all three rebel factions (FUNCINPEC, KPNLF, and the Khmer Rouge) and the government had been involved in logging, which had financed their warfare efforts.⁷⁰ While the government exported mostly to Japan and Vietnam, the three rebel groups (especially the Khmer Rouge) sent logs over the border into Thailand from their territory in western and northern Cambodia.

The export ban, which began on January 1, 1993, was devastating for the military and the logging companies in Thailand.⁷¹ In protest Thailand barred scheduled flights for the UN to and from Cambodia. The Thai parliament's House Committee for Foreign Affairs agreed to seek measures to minimize the effect of a UN Security Council supported ban on timber imports from Cambodia.

Democratic Republic of Congo and elsewhere

As in Cambodia, war in effect imposed a ban on logging in the Democratic Republic of Congo.⁷² Most of the heavily forested areas fell under rebel control, while the government retained control of the major transport routes to the export markets. Thus government-licensed logging concessionaires could not operate, and loggers in rebel territory could not export profitably. Still, (as explained later) this did not stop speculators (often known as "conflict entrepreneurs") from obtaining concession rights to millions of hectares of forest, thereby financing belligerents, including the government.⁷³ At that time, the Kabila government apparently

requested logging companies to cut reserve forests in Bas Congo and split the proceeds 50:50 with the government to help finance the war.

Likewise, the Rwandan Patriotic Army's Congo desk was linked to illicit operations in eastern parts of the Democratic Republic of Congo, as were Ugandan forces to illicit trafficking in commodities.⁷⁴

Just as in the above examples, timber is thought to have fueled conflict in Côte d'Ivoire.⁷⁵ In Afghanistan's Kunar province officials say that smuggling timber "is one of the most lucrative methods of funding insurgent groups."⁷⁶

Stressor 3: Loggers as arms traffickers

The third stressor occurs when logging companies traffic weapons. In one example the UN Security Council Panel of Experts on Liberia documented a payment by a logging company to an arms dealer for a helicopter—an Mi-2⁷⁷—that was then trafficked to Liberia.⁷⁸ The president of OTC, Guus Kouwenhoven, was convicted in a Dutch court in June 2006 of running arms to Liberia in violation of sanctions (both Security Council embargoes and regional moratoriums), although the conviction was overturned on appeal,⁷⁹ even though he admitted to purchasing the Mi-2 helicopter through a known arms dealer, Sanjivan Ruprah.⁸⁰ (The Panel of Experts reported that Ruprah supplied two Mi-2 helicopters to Liberia, as well as spare parts for Mi-17 and Mi-24s helicopters, and was key in procuring Mi-8s through another well-known arms dealer, Victor Bout.)⁸¹

The Liberian TRC stated that OTC organized a minimum of eight arms shipments: at least six by sea and at least two by air. Several witnesses informed the TRC that a ship, the *Antarctic Mariner*, docked regularly at the port of Buchanan, delivering weapons to OTC, and that Kouwenhoven would arrive by helicopter to supervise offloading.⁸²

The FCR concluded that OTC made over \$20 million in payments to nongovernment bank accounts, including \$1.9 million to known arms dealers and "security consultants."⁸³ In exchange OTC was apparently provided flag (tax) receipts signed by Juanita Neal, Deputy Minister of Finance for Revenue Collection (see, for example, figure 3.6). In a letter to the Ministry of Foreign Affairs, Charles Bright, Minister of Finance under Taylor, acknowledged that OTC had made various payments used for military-related purchases and credited as tax payments.⁸⁴

Milton Teahjay, Taylor's former media adviser, implicated OTC as one of the primary actors in the arming of the Revolutionary United Front insurgents in Sierra Leone. He claimed that logging highways into Sierra Leone, paid for with OTC funds, were widely used for moving weapons, as was a private OTC airstrip.⁸⁵

The TRC also alleges that logging concessions were traded for weapons supplies. Leonid Minin,⁸⁶ a Ukrainian-Israeli arms dealer, allegedly delivered hundreds of tons of weapons to Liberia from December 1998⁸⁷ to August 2000 through, for example, Burkina Faso and Niger, in part exchange for a logging concession, the Exotic Tropical Timber Enterprise (ETTE). Minin used forged end-user certificates for a company in Guinea that were signed by General Robert Gueï, the former head of State of Côte d'Ivoire.⁸⁸ In August 2000 Minin was arrested in Italy, in possession of \$500,000 in illegal diamonds, \$35,000 in foreign currencies, drugs, and

documents regarding arms trafficking to Liberia, and with prostitutes.⁸⁹ He claimed that a July 2000 shipment was financed by his partner in the Russian Federation, Valery Cherny of the company Aviatrend, and was organized by Mohammed and Yussuf Salamé of the Mohammed Group of Companies in an arms-for-timber deal.⁹⁰ (Records seized by the FCR⁹¹ indicate that in 2002 the Group sought and obtained written approval from Taylor for a tax credit of \$750,000 “re: military costs.”)

Global Witness alleges that eyewitnesses observed the arrival on May 10, 2001, of the ship *Abu 1* to Harper, the port controlled by the Maryland Wood Processing Industries (MWPI) logging company, and the arrival the same day of a helicopter from the Anti-Terrorist Unit to collect the off-loaded arms shipment.⁹² Likewise on May 8, 2002, the *Arktis Fighter* allegedly unloaded 30 tonnes of weapons, sent from Bulgaria via Nice, France, with logistics handled by a French arms broker. And on December 19, 2002, *MV Posen* unloaded 19 camouflaged trucks that were loaded with arms and ammunition. Further, in October and December 2002, Global Witness⁹³ records that witnesses alleged that the Liberian coastguard *VB2* made regular trips to Harper in the guise of bringing food, while they allege that it was actually transferring arms and ammunition from a vessel stationed at sea.

George Boley⁹⁴ of the Liberian Peace Council has claimed that forestry activities in his territory helped him to buy weapons from the French company CEPIL, using a \$300,000 letter of credit from the French bank Crédit Lyonnais and “later on, LPC [the Liberian Peace Council] shipped wood worth this amount to a friendly company in France which in turn paid back the bank.”⁹⁵

Similarly in Myanmar during the early 1990s, China allegedly sold about \$1.5 billion of arms on credit, which the government in Myanmar tried to pay for, in part, with timber.⁹⁶ Likewise, Russia was apparently willing to accept partial payment in teak for 10 Mig-29 fighter jets and nuclear technology in a trade with Myanmar.⁹⁷ That country’s government also allegedly tried to barter teak for oil with Iraq in May 2002.⁹⁸

Logging companies also procured other materiel, such as boats and uniforms, for the Taylor government in Liberia.⁹⁹ They also claimed that they were forced to build roads in areas outside their concessions but that had strategic military value.¹⁰⁰ In Myanmar roads built by logging companies facilitated the military defeat of insurgents operating from the Thai border region; Thai logging companies were asked to contribute to “the building of a strategic border road that would facilitate Rangoon’s military drive against ethnic rebels.”¹⁰¹

In Liberia many logging companies are accused of providing barracks and logistic supplies to the Armed Forces of Liberia. Allegedly, wounded fighters were taken to the OTC compound for medical treatment, and former NPFL fighters were on the payroll of OTC and the Inland Logging Company (ILC).¹⁰² The WARCO logging company complained that the ILC-supported militia was running the port of Greenville, threatening other loggers.¹⁰³ Likewise, Liberia Timber & Plywood Company protested against being looted by ILC-supported ex-combatants. In the early 1990s Interior Timber Incorporated, on the Sierra Leone–Liberia border,¹⁰⁴ allegedly hosted an NPFL training camp and ran an airstrip used for NPFL supplies.¹⁰⁵ Once Taylor became president, one source suggests that the United Logging Company had one of the largest concentrations of soldiers from

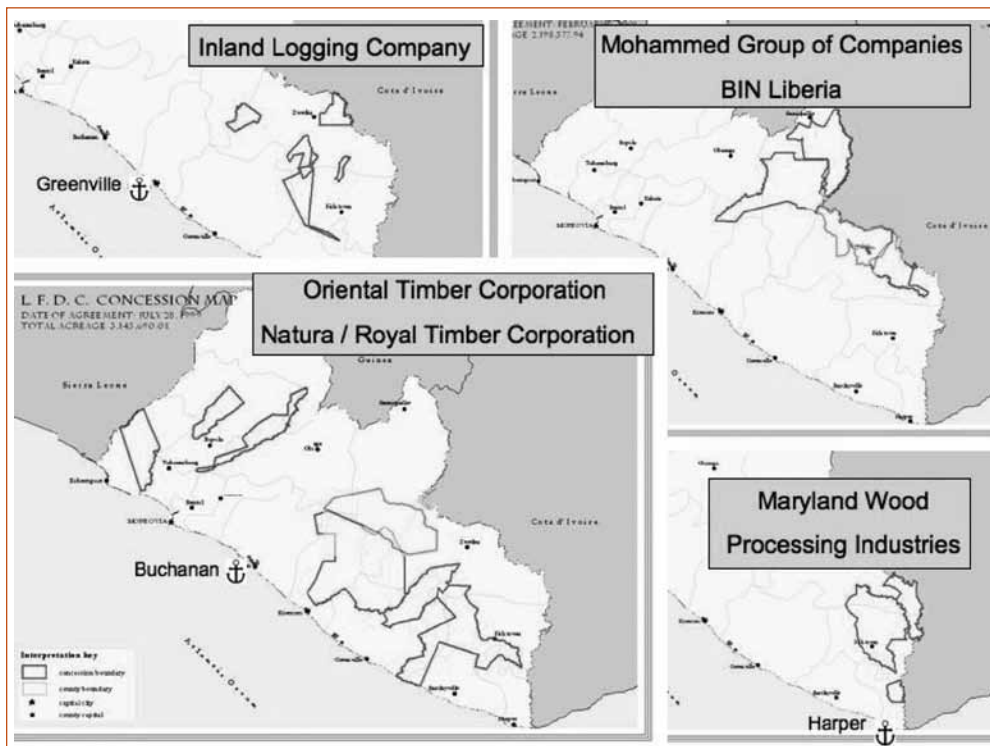
the Armed Forces of Liberia in western Liberia, and that the company's security forces were sent on "special assignments" with the 6th battalion.¹⁰⁶

Stressor 4: Violence by logging companies' security forces

The fourth major stressor is that the private security forces of logging companies act as militias and abuse locals, not just to gain access to forest resources but to loot private property. In Indonesia, a prime example, the military and police allegedly extort loggers for such security services or to ensure safe transit of timber shipments.¹⁰⁷

After the 1997 elections, Taylor divided the forest estate in Liberia among four major companies with close connections (figure 3.7).¹⁰⁸ Each of these companies supported a security force with direct ties to Taylor. The Mohammed Group of Companies was directed by Mohammed Salamé. Its Sabibo Security Forces were directed by General Cocoo Dennis (his NPFL *nom de guerre* was "General Executioner") and Moussa Cisse, both with ties to the Anti-Terrorist Unit.¹⁰⁹ ILC was directed by Oscar Cooper.¹¹⁰ MWPI was directed by Abbas Fawaz, and the NPFL Colonel Sumo provided security. Finally, OTC's president was Kouwenhoven. The commander of the Navy Rangers, Roland Duo,¹¹¹ directed OTC's Lion Heart Security.

FIGURE 3.7: THE FOUR MAJOR LOGGING AREAS DURING THE TAYLOR REGIME



Note: The Inland Logging Company operated the port of Greenville, the Oriental Timber Corporation the port of Buchanan, and the Maryland Wood Processing Industries the port of Harper.

Source: Government of Liberia 2005.

According to the UN Security Council, the logic of this arrangement was that it:¹¹²

- “(a) Provided security to the timber companies, which ensured a supply of revenue to Taylor.
- (b) Gave employment to a number of combatants who had fought with Taylor’s forces.
- (c) Ensured a loyal security force at the major ports, which if necessary could be used to control the regular Liberian army.
- (d) Bolstered Taylor’s ability to defend his territory against, for example, incursions by [the rebel group] MODEL into the south-east.”

After fleeing Liberia for criticizing OTC’s treatment of local people and companies, Taylor’s former media adviser, Milton Teahjay, noted, “Logging companies now constitute the most powerful and politically insulated layer of our national bureaucracy. Logging companies’ private armed militias have now replaced our national police apparatus in rural Liberia.”¹¹³

In his trial Kouwenhoven testified that:

“Taylor indicated that he did not want OTC to employ its own security guards and he said that he himself would arrange for armed security officers for OTC. ... So the intention was that former fighters would be deployed and paid by OTC.”¹¹⁴

Indeed, all four of the forces responsible for security had individuals who fought with Taylor in the NPFL, and all four forces are accused of gross human rights violations or war crimes (or both). For example, in 1999 the government (through the Forestry Development Authority, which was then led by Taylor’s brother Bob) ordered MWPI to pay Colonel Sumo \$4,000 a month to provide security in the southeast of Liberia (appendix 2). Sumo’s forces are accused of entering Côte d’Ivoire to loot and recruit new fighters. He himself is accused of providing arms and soldiers to the faction of the late Felix Doh, who was fighting to destabilize Côte d’Ivoire.¹¹⁵

Sumo and his soldiers are also accused of gross human rights violations and war crimes in Liberia while employed by MWPI as “security.” Eye-witness reports claim that in May 2003 Sumo’s forces attempted to enter Côte d’Ivoire to loot local communities there, but when the local Liberians tried to deny access to his militia (in order to protect their kin across the river border), the MWPI security force massacred the civilians at the village of Youghbor in Liberia. In 2004 the UN uncovered more than 300 bodies.¹¹⁶

When one looks more widely, even after a conflict, ex-combatants—many using combat networks—switch from criminal activities such as looting to illegal logging. In postconflict Aceh for example, demand for timber for reconstruction after the tsunami and discontent over the reintegration payments led many ex-combatants to take advantage of the peace and begin illegal logging (among other criminal activities).¹¹⁷

In Liberia the former NPFL commander Kofi organized his soldiers into teams for logging, cutting trees into planks using chainsaws.¹¹⁸ Also in Liberia, ex-combatants occupied rubber plantations, forcing locals to work as tappers.¹¹⁹ On the role of security forces associated with some logging companies, the FCR concluded: "Some concession holders during this period terrorized local communities and funneled their profits from resource exploitation into personal wealth and private militia."¹²⁰

But even without deliberate violence against local communities, conflict is more likely to arise in logging operations than other extractive industries because of forests' importance to local livelihoods.¹²¹ In addition, local communities often claim forests as customary property (especially when these claims are recognized in the country's constitution and law) and resist loggers' encroachments. These conflicts can turn violent, so engagements with security forces are likely.

Stressor 5: Money laundering

The fifth stressor that forestry helps facilitate is money laundering.

Of the OTC payments mentioned above, the FCR documented that at least \$11 million was deposited into bank accounts other than the Central Bank of Liberia, including at least \$5 million into bank accounts in New York. According to the former Chief Prosecutor of the Special Court for Sierra Leone, this included the \$1,999,975 payment (see figure 4), later transferred to a Citibank account on which Charles Taylor apparently had signing authority.¹²²

The UN Security Council Panel of Experts¹²³ confirmed the FCR's investigation, documenting payments from OTC and its associates to multiple designees.

The Panel requested information from 25 jurisdictions regarding the frozen assets of designees associated with the Liberia sanctions,¹²⁴ but only eight replied.¹²⁵ The amount frozen "is far short of the several hundred million dollars noted by some investigative reporters and the Prosecutor of the Sierra Leone Special Court."¹²⁶ Of the eight countries, China, Indonesia, Switzerland, and the United States responded, but apparently provided no records. For the remainder, at least \$20 million was traced to Taylor, via diverted tax revenue, but nothing yet has been frozen.

Global Witness¹²⁷ alleges that in 1993 Liberian Senator and Taylor associate, Grace Minor, set up a Swiss bank account to conceal money obtained from the Liberian logging industry. In his trial in The Hague, Taylor did not deny that she set up the account.

Reno noted that the use of U.S. currency in Liberia, and the country's corporate registry laws that favor secrecy, make Liberia an attractive country for money laundering.¹²⁸ Forestry is also attractive to money laundering because it generates international money transfers that are legal, such as investment capital to logging operators and payments from buyers, among which illicit payments can be hidden.

Moreover, complicit companies can make weapons payments that might not be monitored by enforcement agencies (such agencies are required to watch the transactions of “politically exposed persons”). For instance, when Taylor’s NPFL controlled most of Liberia during the civil war in the 1990s, an association of loggers, based in San Pedro, Côte d’Ivoire, allegedly served as a logistic and financial intermediary, facilitating payments through Ivorian and Swiss banks to NPFL organizations.¹²⁹

As mentioned, illegal logging attracts other organized crime, especially in conflict zones already entwined with arms trafficking. Kouwenhoven dealt with known weapons and diamond traffickers, and allegedly bought stolen logging trucks from the Hells Angels in Prince George, British Columbia, Canada.¹³⁰ In Myanmar along its Chinese border, logging and the opium trade are frequently linked: drug traffickers have invested in logging to launder money, and logs have been hollowed out to conceal drugs.¹³¹

To sum up, these five stressors are not important enough in most conflicts to play a significant role. Either the forestry sector is too small to influence the belligerents’ behavior, or the belligerents cannot provide sufficient security to protect logging operations. But with these conditions met, timber can have a significant impact on conflict. As insurgent leader, Charles Taylor was able to exert control over territory that generated revenue exceeding \$200 million a year.¹³² Controlling this commerce and allocating who could log or who could mine allowed Taylor to consolidate his control. Then as president he could further consolidate control through formal sovereign state power—state capture—by, for example, rewriting the law to give the executive exclusive control over concession allocation by requiring the legislature to ratify these agreements.

These examples indicate that, if belligerents can maintain sufficient security to allow logging and the export of the forest products, revenue from logging can further conflict. Given this destabilizing role of conflict timber, countries need to develop the capabilities to withstand and ultimately eliminate that role.

CAPABILITIES

Countries need the capabilities associated with good governance, of which the most important aspects are:

- Transparency that helps lead to accountability and enforcement.
- Effective legal and management regimes, including economic efficiency, appropriate incentives, and conflict management.
- High-quality administration, including anticorruption, and monitoring and evaluation.
- Participatory management, including equitable benefit sharing.
- The rule of law.¹³³

Such building blocks help prevent forests from funding conflict and fomenting violence, given the tight relationship between weak governance and illegal logging (see figure 3.1). (Indeed, good governance and strong economic growth help explain why countries like Canada and Norway have avoided the “resource

course.”) To frame this discussion, governance is examined in the context of the constituent chains in the forestry sector (see figure 3.2).

The first is the licensing–regulatory chain. Inevitably after war the government must determine the legitimacy of those claiming the right to log. Not only are overlapping claims likely, but the government must prevent a resumption of “business as usual” by spoilers both in the forestry sector and in society. But it will probably have little capacity, and so should accept (if not encourage) participation by wider stakeholder groups. After reviewing the logging concessionaires, the government (and these stakeholders) may well have to review the legal regime, in order to reduce the opportunities for corruption and to ensure that taxes provide incentives for appropriate behavior (including transport, processing, and sale) and for the state to collect the revenue necessary for reconstruction.

The underlying reporting and enforcement chains will also benefit from improvements in transparency by government regulators and industry actors. These improvements are needed to help provide accountability. If civil society is to play a strong role in oversight, it will need to be supported (especially by the international community that is likely to play a strong political role after conflict); provided with access to timely, accurate information; and given the protection to perform its duties, especially where tensions remain.

Capacity will also need to be developed across a society broken by years of conflict. In Liberia a coordinated donor effort, the Liberia Forest Initiative, helped build this capacity.¹³⁴ Indeed, Liberia is seen by many—from the donor community to the international civil society actors¹³⁵—to have been among the most driven to implement reform—perhaps in part to see the UN sanctions lifted—and also the country with the most vibrant civil society engagement. But even in Liberia, local civil society has recently questioned the government’s political will for reform.¹³⁶

Many of the reform efforts in Liberia were necessary to comply with the conditions set by the UN Security Council to lift the timber sanctions. These conditions helped to build the political will for reform. In contrast, although the UN Security Council supported Cambodia’s self-imposed timber sanctions, because the government of Cambodia controlled when to lift the moratorium, the pressure for reform was less effective than in Liberia (especially when coupled with the failure of the donors to use aid conditions as an incentive for reform). Logging expanded much faster than the government’s enforcement capacity and, perhaps most important, its political will for reform. Still, governments have to ensure enforcement in the field—in Liberia as elsewhere, reforms to allow logging usually seem to proceed much faster than the enforcement capacity to manage them.

Land-use planning

Land-use planning is critical to allocating and managing forests, particularly clarifying property rights, which is extremely problematic after conflict. In Liberia legal conflicts over land are the largest single issue facing the nascent judicial system. Sporadic, violent conflict continues to flare up across the country. This is not unusual, and postconflict countries often face at least two major issues related to land rights.

First, locals are often driven from their land during conflict, as internally displaced people or even refugees, to escape violence. Usurpers gain access or squatters take advantage of the absence of the rightful owner. When peace returns, returnees come into conflict with those who took up residence on their land, especially if the occupants have made investments they wish to protect. To complicate matters, even if records were properly processed, during conflict, spoilers often loot registry offices to create uncertainty over land ownership.¹³⁷ Where disputes over land distribution contribute to conflict, bitterness over competing claims can fester for decades, creating conflict along ethnic, religious, or political lines. Although resolving the overlapping claims is necessary, it will be time consuming, politically fraught, and even dangerous.

In Liberia patronage allocations undermined the legal certainty of who had the logging right—leading to logging companies claiming more than 2.5 times the total area of forest. As discussed, it took a concession review to determine “legitimate” ownership of these rights.

Second, beyond these claims from individuals, many forest-rich countries struggle with rights to collective land, or “community forests.” In some countries colonial and postcolonial administrations took many such rights from local communities or downgraded ownership rights to usufruct, thus creating grievance. More recently especially, such abrogations have created opportunities for corrupt regulators to allocate the rights to log these forests, and so enrich themselves. Grievance is exacerbated when postconflict governments, regarding their forests as vast and sparsely populated, use them as relocation sites for demobilized soldiers and internally displaced people (as in Colombia, Guatemala, Nicaragua, and in the Democratic Republic of Congo, especially in the east.)¹³⁸

In Liberia postconflict forestry reform did not try to solve either of these problems. Instead it left the hard decisions for a multistakeholder land commission that had not yet been formed. The government argued that land ownership issues were beyond the remit of the forestry sector, and as a practical matter, could paralyze the comprehensive reform process. Failing to address the land issue was a controversial decision, especially among community advocates who claimed that it neglected community rights in favor of commercial logging.

Concession review

In Liberia it was uncertain who the legitimate concession holders for logging were. Given the overlapping claims, it was impossible to determine the sole rights holder for most concessions.

The FCR attempted to clarify the uncertainty by evaluating the legal merits of each claimant. It reviewed the companies based on the necessary elements for a legal concession as stipulated in Liberian laws and regulations. During the period in review (1979–2003), at a minimum, companies had to be a legal business, authorized to operate in Liberia, with valid articles of incorporation and a business license;¹³⁹ to have a valid, ratified contract;¹⁴⁰ and to have posted a performance bond.¹⁴¹

The FCR found that no company could meet these standards, even in a single year of operation—meaning that no one had a valid, legal right to log in Liberia. The most obvious violators were the logging companies operating with the consent of the rebel NPFL and the National Patriotic Reconstruction Assembly Government.

During his trial at the Special Court for Sierra Leone, while under cross-examination Charles Taylor related how logging companies asked the NPFL to appoint a rebel government so that the logging companies could pay a nominal Ministry of Finance, and thus avoid any accusations of dealing with insurgents.

The results of the FCR were unambiguous, but the National Transitional Government of Liberia failed to act on the findings. Once duly elected in 2006, however, President Johnson Sirleaf's first executive order was to declare all the bogus claims null and void (she did not have to "cancel" them because there were no legal contracts). But not all parties endorsed this move. Many former loggers were outraged at their loss of access, given their past spending on government officials, some of which they regarded as necessary for "business as usual." Still, they have not mounted any legal challenge, even after the government began allocating over 1 million hectares of new concessions in 2007.

The reason for the success of the FCR (and the likely reason for legal challenges not to have been made) is that the criteria used in the review were clear and agreed to by all members of the FCR,¹⁴² *before* the legitimacy of any of the concessions was examined. Thus the criteria did not prejudge the result. Nor was the review subject to political interference or to on-the-fly decisionmaking to help favored companies. In the end those that opposed the outcome had no legitimate complaint of due process, leaving the results unimpeachable.

Currently, the concession allocation system in Liberia is governed by the Public Procurement and Concessions Act, which requires competitive bidding on all logging contracts.

In the Democratic Republic of Congo, following the recommendations in the 2002 UN Panel of Experts report, the Sun City power-sharing agreement between the rebels and government called for a review of all forest contracts allocated during the conflict. As a result of the May 2002 concession review, Article 5 of the new forestry act set forth simple criteria for cancellation.¹⁴³ The result was to cancel 25.5 million hectares of noncompliant concessions, and place a moratorium on the allocation of any new concessions.¹⁴⁴ Still, the government signed 100 new contracts after the review, adding at least 2.4 million hectares, arguing that it was in the national interest to allow the concessions to stand.¹⁴⁵ Provided that all companies can negotiate social and environmental agreements with local and indigenous populations, the area of long-term forestry concessions will fall to about 12 million hectares, a dramatic decline from the 43.5 million hectares prior to the 2002 reform.

Legal regime

A problem in fragile states is that creating laws and regulations to prevent forestry from fueling conflict may be too onerous for weak institutions. (And here it is not just the government that is weak, but civil society and the industry, also broken by years of conflict—the Democratic Republic of Congo has produced no professional foresters for over a decade.)¹⁴⁶ This stress is exacerbated because those opposed to reform (the spoilers) are likely to argue that *any* new rules, regardless of how complicated, are too onerous. Indeed, their opposition could endanger the overall transition.

Thus the stakes are high. Failure to properly govern the resource could have dire consequences: more than a third of countries recovering from civil war revert to conflict within a decade, often because belligerents can gain revenue from the illegal exploitation of natural resources to fuel the resumption of violence.¹⁴⁷ “Business as usual” is arguably what facilitated Charles Taylor’s belligerence, both as insurgent and as head of state. Elsewhere, access to timber allowed the Khmer Rouge to resume fighting in the remote northern region of Cambodia,¹⁴⁸ and contributed to conflict in the Democratic Republic of Congo, Myanmar, and now Afghanistan.

Given the demands on fragile institutions and donor resources, it is important to ask: What is the minimum set of laws and regulations needed to properly manage the resource? And is there a sequence of reforms that helps establish the enabling conditions for implementation, and build momentum for later reforms? Indeed, under adaptive management, this second question should be asked constantly and iteratively.

Capacity

When there is an apparent lack of capacity, governments and donors need to find out why. Fortunately, objective analyses can be conducted to determine whether a lack of capacity or its obverse—a lack of political will—is more important in holding back efforts to introduce and enforce forestry sector reform. One can examine the track record of implementation and judge where the bottlenecks exist. If they stem from inadequate training or infrastructure, reform can tackle those needs. But if there are other political reasons for these impediments, increased capacity is unlikely to help.

After the 2003 peace agreement the Liberian government realized that it had neither the mechanisms nor the capacity to ensure that it recovered its tax revenue from logging and that illegal wood was not laundered through the legal supply chain. So in 2007, assisted by the U.S. government and more recently the U.K. government and the World Bank, it contracted a private inspection company, SGS, to build, operate, and transfer to the government (after seven years) a chain-of-custody tracking system. This system aims to track, using barcodes, all logs from the point of harvest (the stump) through transport and processing, to sale.

The system should ensure that the government collects all revenue because it will not issue an export permit until the Central Bank of Liberia confirms that the logging operator has paid all taxes. Likewise, the system should reassure consumers that the timber they buy from Liberia is legal, and so facilitate compliance with the U.S. Lacey Act (which prohibits the import of illegally harvested wood) and the European Union’s Due Diligence legislation on timber imports¹⁴⁹ and Voluntary Partnership Agreements, further ensuring market access. Moreover, the system should build expectations within the industry that legal compliance is a requirement.¹⁵⁰

While the U.S. government had recommended outsourcing the chain-of-custody system, it was a Liberian decision, in which the role of the Ministry of Finance was critical. The minister recognized that Liberia had lost tens of millions of dollars, in part because of transfer pricing and other undervaluing of exports. She realized that the cost of a robust tracking system ensuring tax payments by logging operators prior to the government issuing export licenses would easily pay for itself in increased revenue captured for the state.

“Interest-sensitive” analysis helps to explain why breakdowns occur, because those meant to implement the reforms may be caught in a conflict of interest. In the previous example, local officials who previously extorted loggers for transport waybills now face such a conflict in fulfilling their role in a new chain-of-custody tracking system that obviates waybills. If the tracking system succeeds, the local officials lose their payoffs. Hence the need, throughout the forestry industry, to build a constituency to generate the political will for change.

The World Bank’s assessment of good practice in fragile states emphasizes that success is most likely when government takes ownership of reforms, as in the above example. Field experience also bears out this observation. Lack of government ownership can be disastrous, as shown by Peru’s violent protests of 2009 when indigenous groups felt that reforms to the forestry law, which in their eyes allowed community forests to be given away, had been made to comply with the U.S. Trade Promotion Agreement rather than in Peru’s own interests.¹⁵¹

In Liberia’s new allocation system, many in government, industry, and among donors, for example, have complained that the reformed system has too many steps and is thus too cumbersome. A useful analysis would be to examine the time taken to implement each step and determine the rate-limiting step. If that step turns out to be, as nongovernmental groups have charged, political (such as the due diligence review that went beyond its mandate, or legislative ratification that took far too long),¹⁵² additional capacity is not the answer. But if it is seen that the administration lacks the capacity to implement a step, further reform is needed.

Private sector

The forestry industry may have a clear interest in reform if that can help ensure market access for its products. Still, it has to build its capacity, especially in countries recovering from war because the global industry has changed so much. At present, government procurement regulations, such as the U.S. Lacey Act and the European Union’s Due Diligence legislation and Voluntary Partnership Agreements, all make for a much more discerning marketplace, one less willing to accept illegal wood. Many of the old guard in the industry in postconflict countries may not yet recognize this change.

States with weak governance may, though, fail to attract the more socially and environmentally responsible companies. Conflict-prone countries remain too stigmatized for this new, “good” industry. Weak states are left with those operators willing to take high risks and therefore insisting on high returns (not least because their lenders will also insist on high interest rates). At a minimum, these high returns impair the government’s ability to generate tax revenue, and at worst make the actors much more willing to cut corners and deals, which leads to corruption and illegality,¹⁵³ directly contributing to a resumption of conflict.

Moreover, even without a conscious effort to exclude “good” actors, governments are likely to pursue a policy of promoting local companies, if only because local economic growth is important in mitigating conflict risk (and because local politicians do not want to be seen as giving away the country’s lucrative natural assets to foreigners). So countries may favor local operators unfamiliar with the modern industry (or worse, the old “bad” actors), thus prompting inefficiencies and hindering the recovery needed to escape a return to conflict.

In Liberia the Forestry Development Authority turned down offers of assistance by the U.S. government and the World Bank to host trade shows for promoting international investment in Liberian logging concessions.

Civil society

One of the mechanisms to help regulate government and industry behavior is independent monitoring performed by civil society (suggested by Paul Collier¹⁵⁴ and USAID¹⁵⁵ among others). Indeed, civil society organizations may have more capacity than government institutions in fragile situations.¹⁵⁶ But given the huge pressure that this mechanism would put on it, civil society should be supported both within (by donors, for example) and from outside the country, and protected from intimidation when it carries out oversight.

Independent monitoring needs access to accurate and timely data. With such data, individuals, companies, and governments can more easily be held accountable. In Cambodia in 2000 the World Bank's engagement (via the Forest Concession Management and Control Pilot Project) was conditional on independent monitoring. But government intervention undermined the ability of monitors (first Global Witness, then SGS) to function independently,¹⁵⁷ and the director of Global Witness was attacked and beaten in April 2002.

Ideally, information should be easily available, as on websites or other accessible local media. In strained environments, such as postconflict countries, trust among actors is low, and civil society bodies asking for sensitive information, particularly for holding governments accountable, often creates suspicion—and then a backlash. In Liberia respectable civil society members were accused by government and donors of being saboteurs for making relatively innocuous—and legal—requests for full implementation of the law.¹⁵⁸

One mechanism that the government of Liberia has supported in reporting is to include forestry in the Liberia Extractive Industries Transparency Initiative (EITI; appendix 3). EITIs in other countries report all payments made by oil, gas, and mining companies to the government (and vice versa). The EITI secretariat in Oslo did not seem enthusiastic about Liberia's including forestry, however.¹⁵⁹ It may have been concerned that additional sectors would dilute the impact of the initiative or overstretch resources, or that the scale of forestry is different from oil, gas, and mining.

More broadly, robust institutions are necessary for sustainable peace and development. Good leaders are a blessing, but only a temporary one. Building such institutions entails long-term projects. Donors do a disservice by setting unrealistic schedules for building institutions after conflicts. One medium-term solution is a realistic assessment of capacity and outsourcing where appropriate. The World Bank also suggests this is often necessary in the short term.

Speculation

Speculation—a less apparent type of “forest plundering”¹⁶⁰—interferes with the government's goal to resume logging as soon as possible after conflict. It is particularly damaging from a public good perspective when it consists of acquisition through discretionary procedures, at low prices, and without prior local consultation.¹⁶¹

Governments have to monitor logging companies carefully to determine their intent, or at least their ability, to operate according to the concession agreement. Otherwise, the sector will not generate revenue on schedule to help reduce poverty in the way that donors and governments anticipate. In highly uncertain environments (during or after conflicts), many investors may be less interested in logging and more interested in speculating that the value of the concession will increase when peace returns (which will also reduce risk). Governments cannot achieve their projections for logging production if the new concessionaires are speculators. Although speculation may not lose governments money over the long term (other than the opportunity costs), it will lose them time and cause them to miss their revenue projections.

In the Democratic Republic of Congo large-scale speculation was rife during the conflict.¹⁶² The 43.5 million hectares locked up under concessions was disproportionate to timber-supply needs—in fact most of the concessions were in rebel-held areas, and not even accessible when they were allocated.¹⁶³ Even before the war, the yearly production of 500,000 cubic meters only required an area of 6 million hectares.¹⁶⁴ A very low annual land tax provided an incentive for speculation.¹⁶⁵

At present in Liberia logging companies are likely speculating. The Forestry Development Authority has allocated both three-year, 5,000 hectare concessions that allow relatively high logging rates and little planning (because the land is supposedly intended for agriculture) as well as 25-year, 50,000 hectare (or more) concessions that have many more restrictions. Given that most investors still consider Liberia high risk and require an immediate pay-back on investment (three-year periods or less are the norm), one might have expected them to prefer short contracts offering ease of logging. In fact the initial bidders in 2008 were much more interested in the longer contracts, even though they have neither the financial nor technical capacity to manage such concessions.¹⁶⁶

Given the extent of the recent global financial crisis, it may be unfair to judge the behavior of the new logging companies in Liberia, but the forestry sector has dramatically underperformed on expectations. Despite allocations of more than 1 million hectares since the first concessions were awarded in 2008, the first shipments of logs were exported only in March 2010.

Market acceptance

Unless logging products can find consumers, the industry will not be profitable. The international market is wary, though, of dealing with conflict-prone countries. To achieve market access for legal products, exporting countries have to build consumer confidence that the wood they buy does not contribute to violence. Discriminating consumers want to know that their purchases will not fuel conflict. And with evolving standards (like the U.S. Lacey Act), all countries must comply with the new standards if they wish to sell even processed goods in these markets. By acting proactively to establish rigorous standards, a country emerging from conflict can re-brand itself and its timber.¹⁶⁷

One instrument to implement such standards is being developed by the European Union through the Forest Law Enforcement, Governance and Trade program to help reassure consumers, while reinforcing the rule of law in producing countries. Under the program's aegis, the European Union is negotiating bilateral trade

agreements (Voluntary Partnership Agreements—VPAs) where producer countries license all timber exports to the European Union as being “legal” (according to a definition of “legality” and a verification system agreed between the two parties). European Union customs officers will ban entry to any unlicensed shipments from the VPA countries. In this way VPAs should help to improve consumer expectations for timber’s legality from participant countries, increasing market access and possibly securing a price premium.

VPAs should therefore reduce risks for forestry investors by helping ensure market access, especially for the more risk-averse operators who may be the “better” actors. Either way, a successful VPA negotiation will help a government signal its intention to operate according to best practices, the principles of good governance, and the rule of law.

One limitation is that VPAs are bilateral. The European Union designed them this way partly to avoid any claims that they represent barriers to trade, and partly to focus initial efforts on those progressive countries interested in assuring legality in their forestry sector. But because they are not multilateral, there is a risk that illegal trade may merely be displaced from the European export market to a less discriminating domestic market or to non-VPA countries. The hope, though, is that VPAs produce a “cascading” effect, reducing illegal logging within the country through enforcement mechanisms effective within the domestic supply as well. Moreover, the more countries participating, the more likely a global reduction in illegal logging.

Natural Resource Charter

Capacity building too often fails to instill the principles of good governance, offering little more than skills training.¹⁶⁸ Individuals, if they do not understand such principles, are likely at times of crisis to turn to old methods, such as repression. This underscores the importance of rooting all reforms in good governance.¹⁶⁹

At a higher level, one mechanism for countries to signal their insistence on good governance is to announce their intention to comply with internationally recognized best practices. Such an option is to agree to manage resources, including forestry, according to the 12 precepts of the Natural Resource Charter:¹⁷⁰

- The development of natural resources should be designed to secure the maximum benefit for the citizens of the host country.
- Extractive resources are public assets and decisions around their exploitation should be transparent and subject to informed public oversight.
- Competition is a critical mechanism to secure value and integrity.
- Fiscal terms must be robust to changing circumstances and ensure the country gets the full value from its resources.
- National resource companies should be competitive and commercial operations. They should avoid conducting regulatory functions or other activities.
- Resource projects may have serious environmental and social effects, which must be accounted for and mitigated at all stages of the project cycle.

- Resource revenue should be used primarily to promote sustained economic growth through enabling and maintaining high levels of domestic investment.
- Effective utilization of resource revenue requires that domestic expenditure be built up gradually and be smoothed to take account of revenue volatility.
- Government should use resource wealth as an opportunity to secure effective public expenditure and to increase the efficiency of public spending.
- Government policy should facilitate private sector investments in response to new opportunities and structural changes associated with resource wealth.
- The home governments of extractive companies and international capital centers should require and enforce best practice.
- All extraction companies should follow best practice in contracting, operations, and payments.

Countries that implement laws and regulations consistent with this charter and enforce their implementation will be seen as “good” actors by trading partners and donors, who can then reward them with favorable trade status and additional donor assistance.

EXPECTATIONS

The capabilities discussed above to manage the risk posed by the forestry sector are likely to be weak in conflict-prone countries. Many, both in government and the industry, want “business as usual,” and powerful actors may have no political will for reform. If they do not foresee a peaceful future they may well take steps to protect their interests, sometimes violently. To forestall this outcome, governments, donors, legitimate industry, and civil society need to build expectations among all constituents to show that “business as usual” is no longer acceptable. Governments especially must manage these expectations well.

Managing expectations

Overoptimistic expectations are risky, heightened by the danger that failure could result in a return to conflict. So, although transitional governments need to provide security, economic growth, services, and jobs, there are risks inherent in overestimating the forestry sector’s ability to meet these objectives.

Donors may become reticent in funding longer term measures if they feel that success is unachievable. As the World Bank notes in its assessment of what works in fragile states, it is important to balance early visible success with longer term, less visible work (such as, respectively, delivery of services, repair of infrastructure, or on-time payment of salaries; and reform of the judicial system or constitution).¹⁷¹ The reform effort is onerous, and coordination – as in the Liberia Forest Initiative – is likely to prove invaluable. No donor alone is enough to help the government meet its comprehensive needs, and when several are involved they must be committed. Reform takes decades, not a few months or years.

After conflict, logging operators need to build the trust with rural communities that benefits will be shared more equitably than in the past, including local employment. For their part, governments need to build confidence that concessions are allocated in a fair manner, that logging operations are managed sustainably, and that revenue is recovered from the sector and not funneled to enrich the elite or otherwise fuel conflict. Governments also need to ensure that concessionaires are interested in developing the logging sector and not speculating.

Governments and communities often have differing expectations—especially after a conflict—over land ownership and who is to make the relevant decisions. Stakeholder engagement and free, prior, informed consent¹⁷² can help to ensure that communities are consulted; the reformed forestry law in Liberia now requires such consent.

Communities often expect logging companies to provide benefits, both financial (revenue, access to jobs) and in kind (clinics, roads, schools), as well as recognizing their rights. But in Liberia at least, logging companies did not meet these commitments: in a 2002 survey 90 percent of rural communities had no access to clean water, sanitary services, schools, or clinics, whether inside or outside logging concessions.¹⁷³

With a resumption of logging, communities may have unrealistically high expectations for benefit sharing. So to head off disappointment and possibly conflict, these expectations should be codified before operations begin. Communities should understand that their acceptance is an explicit recognition that they are providing a social license for a logger to operate, and so, as long as the operator meets its obligations, they must allow access to the resource.

Given the unequal power relations between local communities and industrial logging companies, grievance procedures and monitoring mechanisms are needed. Without these protections, there is “an open license for the suppression of the poorest and most vulnerable populations’ rights, whom Bank policies were developed to protect.”¹⁷⁴

After conflict, locals frequently expect logging operations to boost local employment from the previous extremely low levels (when operators usually preferred to use labor from outside the area, for reasons mentioned in the introduction). In Liberia fewer than 0.2 percent of Liberians were employed in the timber sector.¹⁷⁵ The Democratic Republic of Congo has seen frequent conflict over companies’ unwillingness to provide local employment.¹⁷⁶

These expectations create tensions with the logging companies and the government. Without formal employment, locals, including ex-combatants, may seek informal, often illicit, work. In Liberia many ex-combatants may now be working in organized illegal logging. (Formal job training, to improve technical capacity and clarify workers’ obligations, may help to resolve some of the problems with local labor that companies claim.)

Ultimately, if peace and development are to be durable, there must be a general expectation (especially among the industry) that countries will insist that their citizens and corporations obey the rule of law. (To

strengthen good governance, consumers too must be discriminating, encouraging a system that trades only in legal goods, as discussed earlier.)

In Liberia logging companies, domestic and foreign, have argued that the review of logging concessions made them question the government's commitment to the rule of law, especially the sanctity of contracts (even though the review's criteria were based entirely on law, and contracts were declared null and void precisely because of their noncompliance with the law). However, the current government has done nothing to demonstrate that it will breach valid contracts. In fact the concession review should be viewed as an important, early step to build confidence on the part of citizens and donors that the new state is committed to, and capable of, reforming the sector.

In Cambodia in the late 1990s and 2000s, donor assistance was linked to conditions that the government had to meet in its reform efforts.¹⁷⁷ For example, after a concession review in 2000, the remaining operators had one year to develop management plans. Yet when the government failed to terminate the concessions without management plans, the perception was that the World Bank was allowing the government to continue regardless. This undermined the expectation that "business" was not going to be "as usual."

CONCLUSIONS

Not all war involves natural resources, much less timber. But forests can fuel war when belligerents control timber-rich forests and when they can provide sufficient security to allow logging operations and ensure that the timber can reach the market. While timber has fueled war in Cambodia, Côte d'Ivoire, the Democratic Republic of Congo, and Myanmar, the prime example of conflict timber is Liberia. First as insurgent leader, then as president, Charles Taylor managed to control territory and extort logging companies in order to fund his war and consolidate control.

In Liberia as in other conflict zones, logging fueled conflict when money flowed from the forestry sector, corrupting officials, funding arms and other material, financing direct intervention of loggers in the conflict, paying private security forces, and facilitating financial crime. Comprehensive reform is needed to deal with these stresses. Corrupt practices, for instance, must be eliminated, such as the allocation of logging concessions based on patronage.

But postconflict environments have a sense of urgency. Financial aid responds to the crisis, in part in the hope that the urgency will translate into a real action for change. But donors and transitional governments alike can be overcome with the need to demonstrate visible change immediately, overpowering the recognition that durable change is a long-term process.

One manifestation of the desire for immediate results is exploiting natural resources for employment and economic growth. Planners often overestimate, however, the returns that forestry—and industrial concessions in particular—can offer. Overoptimistic projections lead to overreliance on the concession-forestry model, where harvesting has outpaced regulatory reform and enforcement. Failure to meet projections can undermine

reconstruction efforts and poverty reduction strategies. More pernicious, perhaps, such a failure will alienate communities and consumers, thus eroding trust in the government's and donors' ability to deliver the promised peace dividend. Most troubling is a return to "business as usual," which may precipitate a return to timber-fueled conflict.

Change is required, but not only in conflict-prone countries. When the UN Security Council placed sanctions on Liberian timber, they were not on the *export* of timber, but on the *import* of timber. It took this step because the Liberian government was not going to carry out sanctions on itself. But it was also implicit recognition that the rest of the world could not be trusted to ensure that timber consumption did not fuel conflict.

Consumers thus have a clear role in limiting the effects of conflict timber, and fortunately the global market is changing. Since the timber sanctions on Liberia's timber, the United States has changed its laws to prohibit imports of illegally harvested wood—and has recently taken the first enforcement action against Gibson Guitars for importing illicit rosewood and ebony from Madagascar. Likewise, the European Union has signed its first VPA, with Ghana, helping to reinforce that country's laws and supporting domestic political will to legalize the forestry sector.

Through such efforts at good governance, reinforced by the marketplace, countries can help to stop resources, such as timber, fueling conflict.

Appendix 1. Minimum tax arrears, 1999 to 2003

Reported arrears for logging companies operating from 1999 to 2003 totaled US\$64,221,424, as reported by the Government of Liberia (2005).

This underestimates arrears because most of the 72 companies had insufficient reports to document arrears and because they do not account for underreported trade such as smuggling or for transfer pricing.

COMPANY	ASSESSED TAXES (US\$)	ARREARS (US\$)
Akkari Timber Inc.	1,525,365	917,557
American Wood Processing Company	not reported	58,311
BIN Liberia Inc.	1,987,526	1,902,169
Carlton Resources Inc.	653,608	653,608
Cavalla Timber	2,596,216	1,187,935
Cestos Timber Corp.	not reported	38,078
Daba Incorporated	990,118	556,208
EJ&J	not reported	39,289
Forestry and Agricultural Products Corporation	630,557	618,483
Forest Hills	192,963	180,212
Forum	447,716	275,262
Gamma Corp.	90,178	67,869
Iberic	346,679	110,605
Inland Logging Company	1,245,841	275,758
Liberian Industrial Agricultural Products	not reported	5,534
Liberian Logging Wood Processing Corp.	1,838,465	1,116,096
Liberia Timber and Plywood Company	not reported	12,503,986
Liberia Wood Management Corp.	1,389,571	610,022
Mabow Logging Corp.	not reported	36,388
Mohammed Group of Companies	5,509,119	5,112,391
Maryland Wood Processing Industries	5,592,884	5,289,950
Natura	1,978,979	0
North Eastern Logging Co.	173,374	165,614
Oriental Timber Corp.	16,400,856	28,738,845
Royal Timber Corp.	2,322,477	0
Togba Timber Corp.	1,255,154	940,453
Tropical Logging	not reported	11,312
Tutex Wood Management Corp.	77,345	23,835
United Logging Company	3,224,105	1,975,659
Xoanon Liberia Ltd.	1,147,778	809,995

Source: Government of Liberia 2005, appendix 2. Exhibit B.

Appendix 2. Letter from Forestry Development Authority requesting Maryland Wood Processing Industries to fund Sumo

REF: MD/107/'98-4

June 18, 1998

The General Manager
Maryland Wood Processing
Industries (MWPI)
Bushrod Island
Monrovia, Liberia

Dear Mr. Manager:

In an effort to improve the security situation in the South Eastern Region, the Management of the Forestry Development Authority (FDA) is pleased to request that you make available the amount of US\$4,000.00 (FOUR THOUSAND UNITED STATES DOLLARS) on a monthly basis to Col. William Y. Sumo, Chairman, Joint Security, South-Eastern Region as your company's contribution toward this worthy cause.

Please be reminded that this amount will be deductible from your future forestry related fees.

We have implicit confidence that you will accord this request your usual consideration and prompt action.

Kind regards,

Very truly yours,


General Manager
MANAGING DIRECTOR

DET/WGB/LKW/agh

Appendix 3. Template for Forestry Reporting within the Extractive Industries Transparency Initiative

The reporting template is “designed to provide sufficient information to reconcile payment obligations versus actual payments made. ...”Space is left at the end of the template for voluntary disclosure of any additional information... [I]ndustry conveyed a strong desire that the public recognize the various contributions that the sector makes to society. Voluntary disclosure is an opportunity to publicize such activities.”¹⁷⁸

Template for Forestry Company Reporting

Name of Company: _____

Reporting Period: _____

Contract area: _____ ha

Area logged in reporting period: _____ ha

REF		VOLUME	UNITS	UNITS	VALUE
Benefit Stream					
1	Production		m ³		
2	Processed products		m ³	US\$	
3	Export		m ³	US\$	
Payments to Central Government					
4	Land rental fees			US\$	
	Amount to:				
	40%	Ministry of Finance		US\$	
	30%	Communities ^a		US\$	
	30%	Counties ^b		US\$	
5	Stumpage Fees			US\$	
	Amount to:				
	90%	Ministry of Finance ^c		US\$	
	10%	Protected Areas		US\$	
6	Forest Products Fees			US\$	
	Amount to:				
	90%	Ministry of Finance ^d		US\$	
	10%	Protected Areas		US\$	
7	Log Export Fees			US\$	
8	Sawmill License Fee			US\$	
	Size of mill:		m ³ /yr		
9	Corporate Income Tax			US\$	
	Withholding Income Tax			US\$	
10	Contract Administration Fees			US\$	
11	Inspection Fees			US\$	
12	Waybill Fees			US\$	
13	Export License Fees			US\$	

REF	VOLUME	UNITS	UNITS	VALUE
14	Other Fees		US\$	
			L\$	
	In-kind payments (& monetary value)		US\$	
Payments to Local Governments				
15	Harvest volume-based payments		US\$	
16	Other monetary payments		US\$	
17	In-kind payments (and monetary value)		US\$	
Other voluntary disclosures				
			US\$	

Management sign off: We acknowledge [or, *On behalf of the Board of Directors (or similar body) we acknowledge*] our responsibility for the fair presentation of the Reporting Template in accordance with the Reporting Guidelines, with the exception of:

- a To be distributed to affected communities through the National Community Benefit Sharing Trust.
- b To be distributed equally among the counties through the County Forestry Development Fund.
- c To be administered by the Forestry Development Authority to manage a network of protected areas.

REFERENCES

- Ballentine, Karen, and Jake Sherman, ed. 2003. *The Political Economy of Armed Conflict: Beyond Greed and Grievance*. Boulder, CO: Lynne Rienner.
- Blundell, Arthur G. 2008. "On the benefits of incorporating forestry into the Extractive Industries Transparency Initiative, with specific reference to Liberia." Scoping Study. Natural Capital Advisors, Vancouver, Canada. Available at leiti.org.lr/doc/liberias_forestry_report.pdf
- Boucher, Alix J., and Victoria K. Holt. 2009. *Targeting Spoilers: The Role of UN Panels of Experts*. Washington, DC: Stimson Center.
- Buszynski, Leszek. 2006. "Russia and Southeast Asia: A New Relationship." *Contemporary Southeast Asia: A Journal of International and Strategic Affairs* 28(2): 276–296.
- CIFOR (Center for International Forestry Research). 2010. "Fact Sheet: Forests and Conflict." Available at www.cifor.cgiar.org/publications/Corporate/FactSheet/forests_conflict.htm
- Clower, Robert W., George Dalton, Mitchell Harwitz, and A.A. Walters. 1966. *Growth without Development: An economic survey of Liberia*. Evanston, IL: Northwestern University Press.
- Collier, Paul. 2007. *The bottom billion: Why the Poorest Countries are Failing and What Can Be Done About It*. New York: Oxford University Press.
- Collier, Paul, and Anke Hoeffler. 1998. "On Economic Causes of Civil War." *Oxford Economic Papers* 50 (4): 563–573.
- . 2000. "Greed and grievance in civil war." Policy Research Working Paper 2355, World Bank, Washington, DC.
- Commission for Reception, Truth and Reconciliation in East Timor. 2006. *Chega! Final Report*. Dili.
- Debroux, L., T. Hart, D. Kaimowitz, A. Karsenty, and G. Topa, ed. 2007. *Forests in Post-Conflict Democratic Republic Of Congo: Analysis of a Priority Agenda*. Jakarta: CIFOR (Center for International Forestry Research).
- De Jong, Wil, Deanna Donovan and Ken-ichi Abe, ed. 2007. *Extreme Conflict & Tropical Forests*. Dordrecht, the Netherlands: Springer.
- EIU (Economist Intelligence Unit). 2002. *Myanmar (Burma) country report*.
- EIA (Environmental Investigation Agency) and Global Witness. 2009. *Investigation into the illegal felling, transport & export of precious wood in Sava Region, Madagascar*. London: EIA and Global Witness.
- . 2010. *Peru's Forest Sector: Ready for the New International Landscape?* London: EIA. Available at www.eia-global.org/PDF/EIA_Peru_Report_Eng_PO3_web.pdf
- European Union. 2010. "Regulation (Eu) No 995/2010 of the European Parliament and of the Council of 20 October 2010: Laying down the obligations of operators who place timber and timber products on the market." *Official Journal of the European Union*, December 12.
- Government of Liberia. 2005. "Report of the Forest Concession Review Committee (FCR Report) – Phase III." May 31. Monrovia.
- Giordono, Joseph. 2009. "Military takes on illegal lumber trade in Afghanistan." *Stars and Stripes*, June 11.
- Global Witness. 2003a. *A conflict of interests: The uncertain future of Burma's forests*. London: Global Witness.
- . 2003b. *The Usual Suspects*. London: Global Witness.
- . 2005. "A Choice for China: Ending the destruction of Burma's northern frontier forests." Briefing document. Global Witness, London.
- . 2007. *Cambodia's Family Trees: Illegal logging and the stripping of public assets by Cambodia's elite*. London: Global Witness.
- . 2010. *Lesson UNLearned: How the UN and Member States must do more to end natural resource-fuelled conflicts*. London: Global Witness.
- Goldberg, Jeffrey. 2010. "George Boley, Liberian Warlord, Is Finally Under Arrest." *The Atlantic*, January 27. Available at www.theatlantic.com/international/archive/2010/01/george-boley-liberian-warlord-is-finally-under-arrest/34330/
- Harwell, Emily. 2003. *Without remedy: Human Rights Abuse and Indonesia's Pulp and Paper Industry*. New York: Human Rights Watch.
- . 2009. *Wild money: The Human Rights Implication of Illegal Logging and Corruption in Indonesia's Forestry Sector*. New York: Human Rights Watch.

- . 2010. *Forests, Ex-combatants and Durable Security: cross-sectoral implications of post-conflict programming*. Working Paper (August). Washington, DC: PROFOR (Program on Forests).
- Husken, Marian, and Harry Lensink. 2007. "All this misery stems from one source." *Vrij Nederland*, March 10.
- IDA (International Development Association). 2007. *Operational Approaches and Financing in Fragile States*. Washington, DC: World Bank, IDA.
- International Crisis Group. 2002. *Indonesia: Resources and Conflict in Papua*. Asia Report No. 39. Brussels: International Crisis Group.
- . 2007. *Aceh: Post-conflict Complications*. Asia Report No. 139. Brussels: International Crisis Group.
- Johnston, Patrick. 2004. "Timber Booms and State Busts: The Political Economy of Liberian Timber." *Review of African Political Economy* 31 (101): 441-456.
- Manson, Katrina. 2008. "Court chases \$375 mln from Liberian Taylor's banks." Reuters, May 8.
- McAlpine, J.L., P.A. O'Donohue, and O. Pierson. 2006. "Liberia: forests as a challenge and an opportunity." *International Forestry Review* 8 (1): 83-92.
- McCarthy, John F. 2000. *Wild Logging: The Rise and Fall of Logging Networks and Biodiversity Conservation Projects on Sumatra's Rainforest Frontier*. Occasional Paper 31. Bogor, Indonesia: CIFOR (Center for International Forestry Research).
- Powers, Mary. 2002a. "Peru forestry law triggers violent protests." Environment News Service, January 7.
- . 2002b. "Peru: illegal loggers invade Indigenous Area." Environment News Service, August 9.
- Prkic, Francois. 2005. "The Phoenix State: War Economy and State Formation in Liberia." In *The Dynamics of States: the Formation and Crises of State Domination*, ed. Klaus Schlichte. Hampshire, UK: Ashgate.
- Reno, William. 1999. *Warlord Politics and African States*. London: Lynne Rienner.
- Rochow, K.W. James, Robert D. Simpson, Alfred L. Brownell, and Oliver Pierson. 2006. "The Liberia Forest Concession Review: Lessons for resource management and restoration of the rule of law." *Journal of Peacekeeping and Development* 3 (1): 89-93.
- Ross, Michael L. 2004. "What Do We Know about Natural Resources and Civil War?" *Journal of Peace Research* 41 (3): 337-56.
- Rustad, Siri Aas, Jan Ketil Rød, Wenche Larsen, and Nils Petter Gleditsch. 2008. "Foliage and fighting: Forest resources and the onset, duration, and location of civil war." *Political Geography* 27 (7): 761-82.
- Samfu Foundation. 2002. *Plunder: The Silent Destruction of Liberia's Rainforest*. Monrovia.
- SDI (Sustainable Development Institute). 2010. *Liberia—The Promise Betrayed*. Monrovia: SDI.
- Tanaka, Shugo. 1996. "Cambodia Timber Export Ban (CAMWOOD Case)." American University. Available at www1.american.edu/TED/camwood.htm
- The Perspective*. 2000. "Investigative Report on Oriental Timber Corporation—Special to the Perspective." March 20.
- Thomson, Jamie, and Ramzy Kanaan. 2004. *Conflict Timber: Dimensions of the Problem in Asia and Africa*. Burlington, VT: Associates in Rural Development.
- Truth and Reconciliation Commission of Liberia. 2009. *Final Consolidated Report*. Monrovia: Truth and Reconciliation Commission.
- UNMIL (UN Mission in Liberia). 2006. *Joint Government of Liberia-UN Rubber Plantations Task Force Report*. Monrovia.
- UN Security Council. 1992a. "Resolution 778 on Iraq-Kuwait." October 2. New York.
- . 1992b. "Resolution 792 on Cambodia." November 30. New York.
- . 1997. "Resolution 1132 on the situation in Sierra Leone." October 8. New York.
- . 2000a. "Final report of the Monitoring Mechanism on Angola Sanctions." S/2000/1225, December 21. New York.
- . 2000b. "Report of the Panel of Experts appointed pursuant to Security Council resolution 1306 (2000), Paragraph 19, in relation to Sierra Leone." S/2000/1195, December 20. New York.
- . 2000c. "Resolution 1306 on the situation in Sierra Leone." July 5. New York.

- . 2001a. "Report of the Panel of Experts on Liberia submitted in accordance with Resolution 1343 (2001)." S/2001/1015, October 26. New York.
- . 2001b. "Resolution 1343 on the situation in Liberia." March 7. New York.
- . 2003a. Panel of Experts interview with director of Evergreen Trading Corporation. 2003.
- . 2003b. "Report of the Panel of Experts pursuant to paragraph 25 of Security Council resolution 1478 (2003) concerning Liberia." S/2003/779, August 7. New York.
- . 2003c. "Resolution 1478 on the situation in Liberia." S/RES/2003/1478, May 6. New York.
- . 2003d. "Resolution 1521 on the situation in Liberia." December 22. New York.
- . 2004a. "Illegal Israeli actions in Occupied East Jerusalem and the rest of the Occupied Palestinian Territory." S/2004/394, May 17. New York.
- . 2004b. "Report of the Panel of Experts pursuant to paragraph 22 of Security Council resolution 1521 (2003) concerning Liberia." S/2004/396, June 1. New York.
- . 2004c. "Resolution 1532 on the situation in Liberia." March 12. New York.
- . 2005a. "Report of the Panel of Experts submitted pursuant to paragraph 8 (e) of Security Council resolution 1579 (2004) concerning Liberia." S/2005/360, June 13. New York.
- . 2005b. "Report of the Panel of Experts submitted pursuant to paragraph 14 (e) of Security Council resolution 1607 (2005) concerning Liberia." S/2005/745, December 7. New York.
- . 2006. "Report of the Panel of Experts submitted pursuant to paragraph 5 of Security Council resolution 1689 (2006) concerning Liberia." S/2006/976, December 15. New York.
- . 2007. "Statement by the President of the Security Council" S/PRST/2007/22, June 25. New York.
- . 2008a. "Report of the Panel of Experts on Liberia submitted pursuant to paragraph 5 (e) of Security Council resolution 1792 (2007) concerning Liberia." S/2008/371, June 12. New York.
- . 2008b. "Report of the Panel of Experts submitted pursuant to paragraph 1 of Security Council resolution 1819 (2008) concerning Liberia." S/2008/785, December 17. New York.
- USAID (U.S. Agency for International Development). 2005. *Forests & Conflict: A toolkit for intervention*. Washington, DC: USAID, Office of Conflict Management and Mitigation.
- Wilson, Emma. 2009. *Company-led approaches to conflict resolution in the forest sector*. Research Paper 4. New Haven, CT: The Forest Dialogue.
- World Bank. 2005. *Fragile states – best practices for country assistance strategies*. Washington, DC: World Bank.
- . 2009. *Roots for Good Forest Outcomes: An Analytical Framework for Governance Reforms*. Report No. 49572-GLB. Washington, DC: World Bank, Agriculture and Rural Development Department.
- World Bank Inspection Panel. 2006. "Cambodia, 2006. Cambodia: Forest Concession Management and Control Pilot Project." Investigation Report 35556. World Bank, Washington, DC.
- . 2007. "Democratic Republic of Congo: Transitional Support for Economic Recovery Grant and Emergency Economic and Social Reunification Support Project." Investigation Report 40746 – ZR. World Bank, Washington, DC.

NOTES

- 1 Wilson 2009.
- 2 According to CIFOR 2010, in the past two decades there have also been violent conflicts in the forested regions of Angola, Burundi, Cambodia, Central African Republic, Republic of Congo, Guatemala, Mozambique, Nicaragua, Peru, Rwanda, and Surinam. Together these countries account for about 40 percent of the world's tropical forest and over half all tropical forest outside Brazil. David Kaimowitz, an external adviser to PROFOR, has noted that this timber-violence nexus can also be found in Bangladesh (Chittagong Hills), Bosnia Herzegovina, Fiji (timber-related coups), Lao People's Democratic Republic (hill tribes), Pakistan (North-West Frontier Province), and Senegal (Casamance).
- 3 Powers 2002a, b; EIA and Global Witness 2009.
- 4 This definition of conflict timber was offered by the president of the United Nations (UN) Security Council, where armed conflict is generally defined

- as more than 25 battle-related deaths a year in a conflict where one of the belligerents is the state (UN Security Council 2007). Global Witness uses a slightly different definition of conflict resources: that is, those whose systematic exploitation and trade in a context of conflict contribute to, benefit from, or result in the commission of serious violations of human rights, violation of international humanitarian law, or violations amounting to crimes under international law (Global Witness 2010). In a report for USAID by Associates in Rural Development, conflict timber is when “combatants harvest and sell or barter trees (and other forest resources) to obtain weapons and other means of war” (Thomson and Kanaan 2004).
- 5 From a dataset of 98 countries and 27 civil wars; Collier and Hoeffler 1998, 2000.
 - 6 Ballentine and Sherman 2003; Ross 2004.
 - 7 De Jong and others 2007.
 - 8 Thomson and Kanaan 2004.
 - 9 Rustad and others 2008; the Rustad paper estimates exports based on FAO/STAT trade data (a problematic approach as it may dramatically undervalue the informal sector and smuggling).
 - 10 For those countries with more than 8 percent of GDP from natural resources.
 - 11 Collier 2007.
 - 12 Defined as the harvesting in excess or without authorization, and/or without paying fees or taxes.
 - 13 The nexus between conflict timber and organized crime is discussed further in this volume’s chapter by Douglas Farah.
 - 14 Thomson and Kanaan 2004.
 - 15 Globally, these 34 hotspots contain 75 percent of the world’s most threatened mammals, birds, and amphibians, while covering just 2.3 percent of the earth’s surface.
 - 16 UN Security Council 2003b.
 - 17 Thomson and Kanaan 2004.
 - 18 Clower and others 1966.
 - 19 Truth and Reconciliation Commission of Liberia 2009.
 - 20 Taylor is now on trial at the Special Court for Sierra Leone for crimes against humanity.
 - 21 UN Security Council 2003c.
 - 22 IMF estimate 2004.
 - 23 UN Security Council 1992a.
 - 24 UN Security Council 1997.
 - 25 UN Security Council 2000c.
 - 26 UN Security Council 2001b.
 - 27 UN Security Council 2001b.
 - 28 UN Security Council 2004c, para. 1.
 - 29 UN Security Council 2003d, para. 11.
 - 30 McAlpine, O’Donohue, and Pierson 2006.
 - 31 Government of Liberia 2005. These findings were highlighted in Truth and Reconciliation Commission of Liberia 2009.
 - 32 Rochow and others 2006.
 - 33 Truth and Reconciliation Commission of Liberia 2009.
 - 34 Government of Liberia 2005.
 - 35 During its operations (1999–2003), OTC apparently generated \$597.5 million in revenue (Truth and Reconciliation Commission of Liberia 2009, para. 31). OTC is owned by Wong Kiia Tai Joseph (chairman), Teng Lung Cheng, Chan Han Kuong, and Guus Kouwenhoven.
 - 36 Documents recovered on Kouwenhoven’s arrest record that ownership of OTC and associated companies were murky (or rapidly changing): files indicated that Taylor’s daughter owned 12 percent of the Royal Timber Corporation (RTC), which itself owned 35 percent of Liberia Forest Development Corp.—the holder of the concession that OTC logged (OTC itself reportedly holds the remaining 65 percent).
 - 37 Husken and Lensink 2007.
 - 38 LJN: AY5160, Rechtbank’s-Gravenhage, 09/750001-05. July 28, 2006.
 - 39 Salamé is a close business associate of Taylor and alleged to have facilitated arms trafficking; he was an ambassador at large during the Taylor regime, and an ambassador plenipotentiary during the subsequent transitional government; he is on the UN travel ban and “assets freeze” sanctions list; despite the travel ban, Salamé repeatedly visited Taylor while in exile in Nigeria, including the day after Taylor first arrived in Calabar (UN Security Council 2006, para. 204).
 - 40 Truth and Reconciliation Commission of Liberia 2009.
 - 41 In the U.S. torture trial of Charles Taylor, Jr., Special Agent Baechtle of the U.S. Department of Homeland Security testified on October 16, 2008, that during his arrest, Taylor Jr. said that “In 1997...[Taylor Jr.]

- got involved in the rubber and timber industry" (Johnston 2004).
- 42 Different groups (often ethnically composed, occasionally across religious divides) have fought violent battles for forest land in northern and eastern Liberia, for example in Voinjama between returning Vai (Christian) and Mandingos (Muslim and associated with the LURD rebel group that fought Taylor in 2000–03).
- 43 Truth and Reconciliation Commission of Liberia 2009.
- 44 SAMFU 2002; The Perspective 2000.
- 45 Global Witness reports, among others, Global Witness 2003a.
- 46 CAVR 2006.
- 47 McCarthy 2000.
- 48 International Crisis Group 2002.
- 49 "It remains unclear whether any such contract was actually ever signed. If it was, however, it did not become fully operational, and no mention of this company can be found in the official lists of concessions published in 2003 and 2005" (Debroux and others 2007). It is believed that international pressure forced the government into squashing the deal (World Bank Inspection Panel 2007).
- 50 Reno 1999.
- 51 In 2010, the building remains unfinished.
- 52 Reno 1999.
- 53 Government of Liberia 2005.
- 54 World Bank Inspection Panel 2006.
- 55 Thomson and Kanaan 2004.
- 56 USAID 2005.
- 57 Reno 1999.
- 58 Reno 1999.
- 59 Truth and Reconciliation Commission of Liberia 2009, para. 62.
- 60 Truth and Reconciliation Commission of Liberia 2009, para. 67.
- 61 He has been convicted and is now imprisoned in the United States for his role in torture in Liberia.
- 62 Truth and Reconciliation Commission of Liberia 2009, para. 66.
- 63 These estimates do not include additional tax evasion related to income or corporate tax, nor do they include the evasion of responsibilities to share benefits with communities, like the building of schools and clinics, as well as profit sharing.
- 64 Government of Liberia 2005.
- 65 FAO FORSTAT data.
- 66 From 1992 to 2010, Liberia was under a continuous UN Security Council arms sanction.
- 67 Special Court for Sierra Leone, cross-examination of Charles Taylor.
- 68 World Bank Inspection Panel 2006.
- 69 UN Security Council 1992b.
- 70 Tanaka 1996.
- 71 Global Witness 2007.
- 72 Thomson and Kanaan 2004.
- 73 Thomson and Kanaan 2004. It is unknown whether the speculators made corrupt payments to government officials in the form of signing bonuses.
- 74 Thomson and Kanaan 2004.
- 75 Thomson and Kanaan 2004.
- 76 Giordano 2009.
- 77 A Polish-made lightly armed helicopter, referred to by NATO as the "hoplite."
- 78 UN Security Council 2004b, Annex XII.
- 79 Why the prosecution chose to exclude the helicopter shipment from the indictment is unclear, and indeed, seemed to baffle the magistrates. It may be because, under Dutch law at the time, there were no implementing regulations for UN sanctions. In March 2010, the Supreme Court overturned the appellate court, and required a retrial to include two additional prosecution witnesses who had also testified in Charles Taylor's trial.
- 80 In testimony in his trial in Holland, Kouwenhoven testified that "Charles Taylor started to use that helicopter around February or March 2002."
- 81 UN Security Council 2001a, para. 225.
- 82 Truth and Reconciliation Commission of Liberia 2009.
- 83 UN Security Council 2004b, para. 116; Sanjivan Ruprah (Appendix 3), an arms dealer, and Fred Rindel (Appendix 4), a former South African defense attaché hired by Taylor as a "security consultant"; see also UN Security Council 2000b, paras. 186–191; and the report of the Monitoring Mechanism on Sanctions against UNITA (UN Security Council 2000a, paras. 162–165).
- 84 UN Security Council 2008a, Annex V.

- 85 Johnston 2004.
- 86 Minin has apparently used 11 aliases, had 4 dates of birth, and held at least 8 passports (UN Security Council 2004c).
- 87 Liberian military offloaded the weapons for the December 22, 1998 delivery, and a few days later the Revolutionary United Front launched a major offensive in Sierra Leone that resulted in the destructive January 1999 invasion of Freetown (UN Security Council 2000c, para. 36).
- 88 UN Security Council 2001a. When the UN Security Council Panel of Experts interviewed Gueï, he acknowledged that after the coup d'état in 1999, he wanted to replenish depleted Ivorian army stocks. He said that Taylor supplied some arms and sent an emissary, Mohamed Salamé, who asked Gueï to sign the end-user certificate. Gueï further acknowledged that some of the ammunition remained in Côte d'Ivoire but most went to Liberia (UN Security Council 2001b).
- 89 An Italian court of appeal ultimately ruled that Italy does not have jurisdiction over these arms shipments that violated UN sanctions, because the arms did not travel through Italy and Minin was not an Italian citizen. It did, though, fine him \$51,000 for possession of the diamonds.
- 90 UN Security Council 2001a, para. 217.
- 91 Government of Liberia 2005.
- 92 The eyewitness also claims that a crewman was killed during unloading when a cable snapped.
- 93 Global Witness 2003b.
- 94 In 2010 Boley was arrested in the United States, charged with committing extrajudicial killings in Liberia and with lying to gain entry to the United States (Goldberg 2010).
- 95 Prkic 2005.
- 96 Global Witness 2005.
- 97 Buszynski 2006.
- 98 Economist Intelligence Unit 2002.
- 99 UN Security Council 2001a.
- 100 Truth and Reconciliation Commission of Liberia 2009, paras. 31 and 43.
- 101 Global Witness 2005.
- 102 Truth and Reconciliation Commission of Liberia 2009, para. 52.
- 103 Government of Liberia 2005.
- 104 Global Witness 2003b.
- 105 Global Witness 2003b.
- 106 Government of Liberia 2005. There are also reports that after the end of the conflict in Liberia, belligerents in Côte d'Ivoire traded cocoa and rice with their Liberian counterparts for timber and arms.
- 107 Thomson and Kanaan 2004.
- 108 Government of Liberia 2005.
- 109 Government of Liberia 2005.
- 110 Government of Liberia 2005.
- 111 020927.DOC; LJN: AY5160, Rechtbank's-Gravenhage, 09/750001-05 July 28, 2006.
- 112 UN Security Council 2004a.
- 113 Johnston 2004.
- 114 020927.DOC; LJN: AY5160, Rechtbank's-Gravenhage, 09/750001-05 July 28, 2006.
- 115 As described in UN Security Council 2004b, box 3, p. 35.
- 116 As described in UN Security Council 2004b, box 3, p. 35.
- 117 International Crisis Group 2007; Harwell 2010 (of which an edited version appears in this volume).
- 118 UN Security Council 2005a, b.
- 119 UNMIL 2007; Harwell 2010.
- 120 Government of Liberia 2005.
- 121 Including shifting cultivation, fuelwood, timber and other construction material, bushmeat, and other nontimber forest products such as medicines and foodstuffs.
- 122 Manson 2008.
- 123 UN Security Council 2008a, para. 103.
- 124 Including the Bahamas, Belgium, Burkina Faso, China, Cook Islands, Côte d'Ivoire, Cyprus, France, Germany, Ghana, Indonesia, the Isle of Man, Italy, Lebanon, Liberia, Liechtenstein, Nigeria, Panama, Singapore, South Africa, Saint Kitts and Nevis, Switzerland, the United Arab Emirates, the United Kingdom, and the United States.
- 125 UN Security Council 2008b.
- 126 UN Security Council 2008a.
- 127 Global Witness 2003b.
- 128 Reno 1999; Until 2002, money laundering was not explicitly prohibited under Liberian law, but activity commonly referred to as "money laundering" would

- generally be prohibited by “aiding consummation of crime”—that is, “purposely aiding another to hide or convert proceeds or to otherwise profit from the crime,” which is a third-degree felony if the principal crime is a first- or second-degree felony (Liberian Code of Laws § 12.5).
- 129 Reno 1999.
- 130 Confidential communication with Canadian law enforcement. Kouwenhoven had previously confirmed to the author that he had traveled to the remote town in northern British Columbia to buy logging trucks.
- 131 Global Witness 2005.
- 132 Reno 1999.
- 133 World Bank 2009. This expands on the building blocks of good governance and includes specific recognition of the stability of forest institutions and conflict management; the quality of forest administration; coherence of forest legislation; and economic efficiency, equity, and incentives.
- 134 McAlpine, O'Donohue, and Pierson 2006.
- 135 Boucher and Holt 2009.
- 136 SDI 2010.
- 137 All records were destroyed in East Timor, and the registry was looted in Liberia during the conflict.
- 138 Debroux and others 2007.
- 139 The company had to be legitimate, so that, for example, assets could be recovered if the contract terms, including tax payments, were violated.
- 140 The contract cannot be considered executed until signed and ratified. After Charles Taylor purportedly changed the law in 2002, legislative ratification was no longer necessary (purportedly because there is apparently no record of the law at the legislature).
- 141 The contract cannot be considered executed until the performance bond is posted.
- 142 Which included the Forestry Development Authority, and ministries of justice, commerce, and finance.
- 143 Debroux and others 2007.
- 144 Debroux and others 2007.
- 145 Discussion with Pierre Methot, the external expert adviser to the Democratic Republic of Congo Concession Review. A noted weakness of the review was that community participants could not travel in a timely manner to engage in the committee's decisionmaking—they were not given enough time for the arduous travel from rural areas. But generally they were pleased that they had actually been consulted—for the first time—on decisions related to “their” forests.
- 146 Debroux and others 2007.
- 147 Collier and Hoeffler 1998, 2000.
- 148 Thomson and Kanaan 2004.
- 149 European Union 2010.
- 150 A side benefit is greater inventory control; the first logging company operating under the system sent their inventory to their Chinese buyer, who then offered to buy a species that was previously thought to have no commercial value. Had the inventory not been prepared, the logging operator might never have thought to sell that species.
- 151 EIA 2010.
- 152 SDI 2010.
- 153 In Indonesia, loggers have admitted to illegal logging in part to recover costs associated with corruption (Harwell 2009).
- 154 Collier 2007.
- 155 Thomson and Kanaan 2004.
- 156 In such situations, a temporary arrangement may be necessary to allow such organizations to carry out the delivery of basic services, with explicit plans for how to move these functions back to government once the institutional capacities are sufficient (World Bank 2005).
- 157 World Bank Inspection Panel 2006.
- 158 SDI 2010.
- 159 Blundell 2008.
- 160 Debroux and others 2007.
- 161 Debroux and others 2007.
- 162 Debroux and others 2007.
- 163 Debroux and others 2007.
- 164 Debroux and others 2007.
- 165 Debroux and others 2007.
- 166 SDI 2010.
- 167 In the early 2000s, European timber buyers requested that logging companies in Liberia change the names of the logging company on shipping manifests because of the risk to the buyer's reputation if their customers learned that they were trading with Taylor's Liberia (Prkic 2005; SAMFU 2002). OTC apparently replaced its name on invoices, creating a

- new identity, the Evergreen Trading Corporation (UN Security Council 2003a).
- 168 Acting Chief of Staff of the UN Mission in Timor Leste, Colin Stewart, UN Department of Peacekeeping Operations meeting in Cairo, 2009.
- 169 World Bank 2009.
- 170 "Natural Resource Charter." Available at <http://www.naturalresourcecharter.org/index.php/en/the-precepts>.
- 171 IDA 2007.
- 172 Free means without coercion or intimidation, prior means with sufficient time to gather and process information, informed means being provided with all relevant information, and consent means clear agreement by legitimate representatives with the full participation of the community.
- 173 UN Security Council 2003b, para. 58.
- 174 World Bank Inspection Panel 2006.
- 175 UN Security Council 2003b, para. 58.
- 176 Debroux and others 2007.
- 177 World Bank Inspection Panel 2006.
- 178 Adapted from the Liberia EITI; Blundell 2008.

4

FORESTS, EX-COMBATANTS, AND DURABLE SECURITY: Cross-sectoral implications of postconflict programming

Emily Harwell

In many recent conflicts where lootable¹ natural resources played a central role, control of the extraction and trade of forest products was important not only for environmental protection and sound management of natural capital, but also for security reasons. Yet the sound and equitable regulation of natural resources, even when they have been significant sources of grievance or conflict funding, is a topic that rarely figures in peace negotiations and subsequent peacebuilding. If resources do figure, they are treated as bargaining chips to induce fighters to lay down arms. Further, the cross-sectoral impacts on forests of interventions such as disarming, demobilizing, and reintegrating ex-combatants (DDR) have rarely been the subject of analysis or responsive planning, in the urgency to disarm combatants and establish security.

The routine difficulties of DDR programs in postconflict environments represent threats to controlling and managing lootable forests, and include continued availability of weapons, persistence of command structures, widespread unemployment, and problems in creating alternative livelihoods for fighters. These difficulties combine with criminal experience gained during wartime, eroded social networks, dysfunctional law enforcement and forestry agencies, and high demand for raw resources for reconstruction and recovery. DDR challenges then feed an illicit economy of forest extraction by ex-combatants and corrupt government partners, which can disadvantage the livelihoods of conflict-affected local communities and flare up into renewed violence. Some evidence shows, however, that the importance of lootable resources in building and keeping the peace is gaining wider recognition.

This chapter traces two cases where inadequate DDR programs initially led to the involvement of ex-combatants in illegal forestry sectors. In Liberia a flexible and coordinated approach to rubber theft and criminality allowed the return of security to Guthrie plantation (which had been occupied during the war) and consensus building on various sectorwide trade reforms. Establishing the rule of law proved impossible on another plantation at Sinoe, however, because of logistical difficulties, lack of political will to clarify tenure of the existing resource concession, and entrenched government corruption. In addition, United Nations (UN) sanctions and anticorruption measures like the Governance and Economic Management Assistance Plan (GEMAP) and the Extractive Industries Transparency Initiative lack levers. So, the political will for deeper reforms, such as concession review, evaporated following a fall in rubber prices and subsequent decline of illegal tapping and theft of rubber.

In Aceh flawed reintegration programs resulted in disenchantment among fighters from the Gerakan Aceh Merdeka (Free Aceh Movement, or GAM by its acronym), failures that often boiled over into violence. The governor's attempts to safeguard Aceh's natural capital in postconflict and postdisaster pressures faced

significant resistance, including those from his own party's rank and file who sought alternative livelihoods in illegal logging. Recruiting ex-combatants and other community members as forest guards may offer promise (if they are well paid and well supervised) as a conflict-sensitive strategy to protect forests and create jobs. It should benefit ex-combatants *and* conflict-affected community members, contributing to durable security and reducing poverty.

INCORPORATING NATURAL RESOURCE MANAGEMENT INTO POSTCONFLICT RECOVERY

With the increasing awareness of the key role of natural resources in exacerbating conflict and in supporting livelihoods of ex-combatants and war-affected communities,² the UN Department of Peacekeeping Operations (DPKO) has recognized the considerable challenges to DDR and the threats to durable security posed by poorly regulated natural resources, organized crime, and economic insecurity. In a recent report on "second generation" DDR emphasizing the need for continual monitoring and flexible response to security hotspots, DPKO notes that political elites involved in trade or illegal exploitation of natural resources and other illicit commodities undermine state authority and legitimacy. "Natural resource exploitation continues to fund violence (for example, Afghanistan) and illegal activities (for example, Côte d'Ivoire, Haiti, Liberia), threatening the likelihood of success for state building and undermining efforts to establish or restore the rule of law. These issues also challenge DDR efforts, as in Afghanistan, Côte d'Ivoire, and Liberia!"³

Looking at poverty reduction and analyzing its experience in postconflict environments, the World Bank confirms the need to base strategy on strong political, economic, and conflict analysis of contextual factors. These include the "history of institutional development and conflict; lack of commitment to reform versus capacity constraints ... the presence of natural resources; or the freedom and relevance of information flows."⁴ In particular, the Bank's Conflict Analysis Framework showed the cross-cutting role of resource management in poverty reduction in many of the cases it analyzed (including Burundi, Cambodia, Chad, Nepal, Rwanda, and Sierra Leone). Its analysis also found that unregulated exploitation of lucrative resources such as gems and timber, or conversely, the government use of lucrative resource concessions for patronage, led to environmental degradation and "more significantly, destroyed the income earning potential of groups that depended on these resources for their livelihoods."⁵ The Framework notes that a "conflict-sensitive poverty reduction strategy" might redress these issues through the regulation and managed use of such resources.⁶

Despite this increasing awareness in some circles of the development community, natural resource governance is still routinely neglected as a core goal in peacemaking and peacebuilding. Even where resources have played a central role in armed conflict, resource management reform too often remains marginalized as a secondary postconflict development goal.⁷ It should instead be made an integral pillar of security, of conflict-affected populations' economic well-being, and of state legitimacy. Peace agreements rarely include provisions for natural resource management, even when signatories (and other concerned parties) recognize that control of resources was an important contributor to the war (such as Côte d'Ivoire and the Democratic Republic of Congo).

When resources are included, it is most often in the context of benefit-sharing agreements among the warring factions as inducements for belligerents to lay down arms (as, for example, Angola, Liberia, Sierra Leone, and Solomon Islands). UN sanctions on timber (Liberia) or donor pressure (the Democratic Republic of Congo) have in fact provided leverage for forestry reform into the postconflict period.⁸ But the absence of management reform provisions in peace agreements—implicitly treating resource ministries as spoils of war—ensures there is no solid foundation for equitable or sound management of the resource.

The UN DPKO notes a further consequence of such provisions' absence in peace agreements, namely that "the inclusion of governance or regulation of natural resources is also not adequately addressed in UN peacekeeping mandates, particularly in ways that deal with the need for alternative livelihoods for those involved [in illegal extraction and trafficking] and the regional dimensions of resource trade."⁹ This neglect persists, even though a decade ago the Brahimi report to the UN on peacekeeping operations recognized that "where such income streams from the export of illicit narcotics, gemstones or other high-value commodities cannot be pinched off, peace is unsustainable."¹⁰

DDR CHALLENGES AND SECURITY THREATS

Although all conflict and postconflict circumstances are unique, they offer characteristic challenges for DDR programs and policing, posing significant threats to durable security. They include a disgruntled rank and file due to a failure of DDR benefits to trickle down, unemployment, incomplete disarmament, persistence of command networks, inability or unwillingness of fighters to return to home community life, and underfunded and dysfunctional law enforcement. These all combine into a problematic scenario where fighters present a risk of either threatening a return to war or moving into criminal activities, entailing new risks of protracted violence.

Disgruntled rank and file. In the initial stages, agencies implementing DDR programs must often go through the chain of command to channel program benefits to the rank and file. They have to do this because of logistical difficulties in reaching out to combatants directly, and because of combatants' concerns with providing lists of names in case the lists are later used for retaliation against them. Commanders often monopolize ex-combatant benefits for themselves and their families or followers, excluding the rank and file. In addition, inducements for upper-level commanders are rarely available to lower-level fighters. These dynamics often lead to rank and file ex-combatants, and even former mid-level commanders, feeling disgruntled that elite commanders have benefited more from peace agreements, while they are left with few means of livelihood (or at least not rewarded as much as they feel entitled).

Unemployment. Although aid and investment often flow into postconflict countries, it is often hard to create sustainable job opportunities there, unlike launching short-term "emergency employment programs" or "quick-impact projects." The flight of capital and entrepreneurs is a characteristic problem of conflict-affected countries. Attracting investment to these environments is difficult, and investors who accept the risk often do so to speculate rather than to establish productive operations that generate employment and revenue for the state.¹¹

A 2008 survey in Liberia established a close link between unemployment and the potential for renewed fighting. It found that a greater proportion of unemployed than employed respondents envisaged returning to war. It also found that ex-combatants who held a job before the war but were subsequently unemployed were the group most likely to return to combat.¹²

The unmet need for employment and sustainable livelihoods for both ex-combatants and noncombatants thus affects security as well as poverty reduction. Unemployment—especially when expectations of peacetime employment (realistic or not) are not met—has the potential to generate grievances that can lead either to recurrence of civil war or to protracted spells of crime, food riots, or ethnic violence.

Incomplete disarmament and demobilization. Disarmament is often incomplete when trust in the disarmament process is low, oversight lacking, or both.¹³ Weapons are therefore often readily available (although fewer than during open conflict).¹⁴ Such availability is a particular problem in areas that have porous borders with other fragile states (such as Liberia with Côte d'Ivoire and Guinea) where weapons can easily be obtained and brought across the border. Although the DPKO report recognizes the need for a regional focus,¹⁵ when disarmament is undertaken as a national rather than regional program, arms (and fighters) can quickly flow across borders, undoing peacebuilding.

Additionally, command structures often persist into peacetime because of a lack of other social networks, and the reliance of ex-combatants on commanders to help them secure DDR benefits or other economic opportunities.¹⁶

Failed reintegration into home communities. Some research has found that ex-combatants involved in brutality (whether coerced or not) against their home communities have the most difficulty reintegrating.¹⁷ If ex-combatants are unable or unwilling to return home, they find themselves with nowhere to go, without employment or peacetime social networks, but with guns, combat networks, and—often—criminal experience in theft and violent intimidation.

Underfunded and dysfunctional law enforcement. Although donor support of security reform usually grants police in the capital access to training, funding, and technical resources, it often fails to reach police in rural areas, which may be rich in forests, plantations, or mineral deposits. As on the Liberian rubber plantations, local police often rely on (if not extort) natural resource companies for housing, fuel, even food. This is also true of local officials working for resource management agencies, who, nominally tasked with oversight and enforcement but lacking the necessary capacity, use their position to solicit bribes. Thus arises a conflict of interest that significantly compromises resource law enforcement.

POSTCONFLICT STRUGGLES OVER FORESTS AS A THREAT TO DEVELOPMENT AND SECURITY

According to World Bank analysis, postconflict development can offer an environment of rapid change and opportunity for reform.¹⁸ These advantages stem from the availability of aid and the greater absorptive capacity for it, and high fluidity in (and expectations for) the policy of transitional administrations.

Without consensus on systematic reforms, however, easily extracted natural resource sectors such as forests and tree plantations often bear the brunt of weak economies, dysfunctional state institutions, and security concerns related to unemployment and flawed or incomplete DDR. Short-term trade-offs that allow ex-combatants' illegal resource extraction in the interests of political stability can have the unintended consequence of disenfranchising local communities and escalating security threats.

Further, the DPKO report notes that, "there appear to be deep-rooted assumptions that in postconflict settings, economic recovery will occur, providing absorption capacity for former combatants and other war affected people. Yet evidence for this is severely limited. In postconflict settings, there is often a lack of diversification in the economy and a heavy dependence on particular resources (Liberia, Afghanistan)."¹⁹

Conditions in postconflict settings often undermine the livelihoods of conflict-affected communities and pose a significant security threat, including high demand for and low supply of resources, lack of clear ownership and use rights, ineffective resource management agencies, and a lack of interagency coordination.²⁰

High demand for and low supply of resources. Local demand for timber rises sharply in postconflict countries, reflecting the need for reconstruction. The transitional government, UN, donors, and myriad international nongovernmental organizations often contribute to this demand by buying illegally sourced wood (neglecting to carry out any due diligence) for their projects and their own infrastructure. They are likely to see certain types of resources, especially those lootable, as engines of postconflict development and employment.

In Liberia estimates of the increased postconflict demand for timber were some 40,000 cubic meters annually (for a total annual wood demand of some 100,000 cubic meters).²¹ In Aceh, where massive reconstruction was needed after the December 2004 tsunami, the increased demand just to rebuild homes was estimated at over 650,000 cubic meters (roundwood equivalent),²² much of it supplied illegally by ex-combatants. Unprocessed rubber in Liberia was in short supply for the large processing plants, caused by poor plantation management and minimal replanting, and by illegal tappers' destructive practices.²³

Lack of clear ownership and use rights. Government officials' use of timber and rubber concessions for patronage (they often granted the same concession area to multiple patrons when the tides of political favor shifted), coupled with their failure to recognize customary claims to forest when allocating extraction rights, results in overlapping claims to forests and plantations. This makes it hard to tell who has the legal right to extract the resource. Elite claims to these resources make concession review a politically contentious undertaking that requires strong government commitment and donor support. Without clear rights, there is

often a perception within government that the asset-stripping, degradation, and even theft of “un-owned” natural resources are victimless crimes.

Ineffective resource management agencies. Where the resource was primarily used for patronage rather than sound management, management agencies are likely to be chronically underfunded, understaffed, and therefore intentionally ineffective. Further, flight of expertise and capital are common side effects of violent conflict, and often—especially with centralized authority—weaken the capacity of local officials, who become proficient at negotiating bribes. This lack of capacity, with dysfunctional law enforcement, leads to a lack of government control of the resource.

Lack of interagency coordination. The above dynamics foster an insecure environment of rampant resource crime: local workers and conflict-affected communities suffer violence and human rights violations, and resources become degraded to the detriment of dependent local populations and to the long-term economic value of the natural asset. But peacekeepers are often unwilling to enforce resource crimes, which they see as a function of law enforcement and customs agencies and therefore outside their mandate. They also sometimes worry that undisciplined soldiers may use opportunities such as checkpoint controls for extortion and rent-seeking.²⁴

THE LIBERIAN RUBBER PLANTATION TASK FORCE

The rubber sector has for decades been critical to the Liberian economy and local livelihoods. The first plantation was leased in 1926 to a U.S. rubber company, Firestone. The total area under rubber concessions, held by seven companies, was 1.38 million acres a few years ago.²⁵ The International Monetary Fund reported that from 1997 to 2002 rubber exports increased from \$19.4 million to an estimated \$57.4 million, despite a fall in global rubber prices.²⁶ According to the Food and Agriculture Organization (FAO), in 2000–06 rubber production hovered at around 100,000 tonnes, making Liberia the sixth-largest producer in the world, despite the war and insecurity before 2004.²⁷ Firestone is the largest employer in Liberia; in 2006 rubber accounted for 90 percent of the value of total exports.²⁸ Little wage employment was available outside rubber, as other formal sectors such as timber and mining had yet to restart operations after the war.

The high price of rubber made the largely unsecured plantations an attractive source of income for combatants and the political elite alike. In 2003 as the rebel group Liberians United for Reconciliation and Democracy (LURD) approached Monrovia, Guthrie plantation, just 50 kilometers north of the capital and with good access on paved roads, was abandoned by its commercial operator and occupied by LURD combatants. LURD commanders set up an organized system through the rebel chain of command (some of whom had disarmed) over the plantation and the local tappers. Tappers were intimidated into selling their rubber at vastly reduced prices to the ex-combatants, who then resold it to Firestone and others at much higher rates. The LURD also extracted a 15–20 percent “tax” for all the rubber produced on the plantation as well as from processors wishing to buy the rubber for their processing plants. Although illegal, these revenues amounted to hundreds of thousands of dollars a month, unreported and untaxed.

After the war in Sinoe county, more than 200 kilometers from the capital on virtually nonexistent roads, a loose conglomeration of ex-combatants from the LURD, the Movement for Democracy in Liberia (MODEL), and the National Patriotic Front of Liberia (NPFL) converged on Sinoe plantation. The plantation was controlled at least partly by an organization called the Community Welfare Committee established by ex-combatant Leon Worjlah, whose *nom de guerre* was White Flower. Like other commanders who set up control posts, he apparently charged buyers a \$50 entrance fee to the plantation (which was easily controlled since there was only one way in) plus an additional 10 percent “tax” on any rubber taken out of the plantation, amounting to tens of thousands of dollars a week.²⁹ This was a convenient and cost-effective way to extract revenue from the local tappers without having to employ them.

On the Cavalla plantation in Maryland County by the Côte d'Ivoire border (more than 300 kilometers from Monrovia), MODEL combatants had a different strategy. They drove out the Lebanese-Ivorian company GINOL/CRC (owned by Abbas Fawas, a friend of former President Charles Taylor) in 2003.³⁰ They then put Camille Charafeddine (also of Lebanese descent and whose family were competitors of the Fawas family) in charge of employing tappers and operating the plantation “in the interests of MODEL.”³¹ The Charafeddine family also controlled major timber companies in Maryland county (territory controlled by MODEL in 2003) as well as a ferry across the border that was crucial for moving rubber into Côte d'Ivoire to processing plants.³² However, the brief control of Cavalla by Charafeddine ended just a few months later: the Maryland Legislative Caucus installed an interim management team (thereby acting beyond its authority, according to a subsequent Supreme Court writ),³³ which failed to pay tappers’ wages for many months at a time, increasing rubber theft and worker unrest.³⁴

On both the Guthrie and Sinoe plantations, ex-combatants either displaced, or prevented from returning, companies that claimed lease rights to the concession (although the legality of their allocation is unclear). Yet ex-combatants retained their ability to illegally occupy the plantations after the end of the war, partly by bribing local officials. “The prices of rubber were high. No one in the transitional government stuck their neck out because people were getting rich,” commented one reintegration field adviser. Indeed, one peacekeeping representative commented that Guthrie was so close to Monrovia that they could easily monitor the situation. He said that if things got out of hand, peacekeepers could easily travel the paved road and be there in a matter of minutes. But if the ex-combatants were expelled, he argued, they might disperse to more remote locations that would be more difficult to monitor and respond to if trouble arose.³⁵

The ex-combatants were vicious, subjecting local communities and tappers to rubber theft, intimidation, and violence, including killings.³⁶

A significant security concern was the lack of alternative employment for ex-combatants. The reintegration program was oriented more toward job training than job creation, such that many ex-combatants were trained for vocations that had no job market (one commonly cited example is the program in auto mechanics in Lofa county, which has only 50 serviceable vehicles).³⁷ Many ex-combatants seemingly chose their training program on the profits they would make from selling the tools they would receive as part of the program. One source closely involved in the Rubber Plantation Task Force (RPTF) said that the ex-combatants (and the

officials in the transitional government benefiting from its presence) continued to defend the occupation, arguing that the peace negotiations in Accra had allowed ex-combatants to remain on the plantation until better opportunities arose.³⁸ No such language exists, but in the tense period after the agreement and with few other employment opportunities available, the occupations were initially allowed to continue in the interests of controlling the security threat posed by unemployed ex-combatants.

Lack of reform in the rubber sector

Resources played a central role in waves of armed conflict in Liberia, both through revenue from sale of natural resources, as well as bribes and favors paid for access to lucrative concessions. Although the UN Security Council imposed sanctions on the international trade of diamonds and timber from Liberia, it did not do so for other important commodities such as rubber and iron ore. These commodities were also plagued by the same predatory mismanagement in forestry and mining, which ultimately local grievance and armed conflict.³⁹

Despite its economic importance (or perhaps because of it), rubber had no UN sanctions. Nor was it included in national anticorruption management mechanisms, such as GEMAP⁴⁰ or the Extractive Industries Transparency Initiative (which in Liberia includes timber). In addition, the rubber sector and the Ministry of Agriculture did not undergo the same reform undertaken in the mines and forestry departments. Yet rubber suffered from many of the same ills as forestry and mining, including use of concession allocation for patronage (resulting in overlapping claims on many of the plantations, including Guthrie and Sinoe); lack of control mechanisms for rubber products or government revenue; cross-border smuggling and widespread crime; corruption and loss of government revenue from unpaid fees; and violent clashes with company security forces.

The lack of state control of the rubber sector, due to ineffective government presence, dysfunctional law enforcement, and government corruption, threatened the livelihoods and safety of rubber workers and communities near the plantations. Deteriorating security on the occupied plantations also risked escalating into renewed conflict.

The lack of control, pervasive rubber theft, and illegal “taxes” hit many elements in this keystone of the Liberian economy and the biggest source of employment. It undermined government revenue from rubber, the investment climate (as companies were driven from concessions or prevented from taking control of them by armed ex-combatants and corrupt officials), sector sustainability (due to destructive “slaughter tapping”), and ultimately the viability of the sector.

The Rubber Plantation Task Force

One of President Ellen Johnson Sirleaf’s first actions after her inauguration in January 2006 was to address the deteriorating security on the occupied plantations—she established the RPTF the following month. She formed it largely because of local security hotspot monitoring by the United Nations Mission in Liberia (UNMIL), and because of concerns not just of security threats but also the human rights and livelihood needs of tappers, conflict-affected communities, and ex-combatants. The RPTF was a flexible response to both security and conflict-sensitive development needs. As one expert put it, “Law enforcement alone would

never be the solution to this problem, given the huge financial need of the impoverished Liberian population, many of whom lived in or near the principal rubber growing areas.”⁴¹

Another strength of the RPTF was its cross-sectoral coordination. It had representatives from:

- Government (Agriculture, Finance, Gender and Development, Internal Affairs, Justice, Labor, Planning and Economic Affairs, Rubber Development Authority, Environmental Protection Agency, National Commission on DDR, National Security Agency, and the Liberian National Police).
- Private sector (Rubber Planters Association).
- UNMIL (Reintegration, Rehabilitation and Recovery; Human Rights; Civil Affairs; Public Information; Legal and Judicial Support; Political Planning and Policy; Corrections Advisory; Gender; Environment; UNPOL; Military; Administration; and United Nations Development Programme).

One source commented that this was the first time there had been this level of coordination within a UN mission on an issue, much less between UNMIL and a wide array of government agencies.⁴² In this regard the RPTF may be taken as a model of good practice.

The RPTF also contributed to consensus building, potentially paving the way for wider reform. It built awareness and confidence that led to progress on reforms in the sector more broadly (although with some reversals), including an executive order that mandated the reduction and licensing of predatory middlemen, a prohibition of buying stations within a five-mile buffer zone of competitors' plantations (to discourage rubber theft), and an export ban on unprocessed rubber (to recoup an estimated 40 percent loss in processed value).⁴³ The export ban was designed to foster local value-added processing, thereby discouraging smuggling, improving private sector and government revenue generation, and creating jobs. An UNMIL rubber consultant estimated that if the government had fully implemented the export ban and collected all taxes, it could have taken \$300 million in taxes in 2008 for the production of some 110,000–120,000 tonnes.⁴⁴

The executive order also established an earmarked fund for a Rubber Development Fee on processed exports. Part of this revenue (20 percent) was to be returned to local communities. An UNMIL consultant recommended that the fund also be used in rehabilitating the plantations and financing the Rubber Development Authority, which he found to be “functioning in name only” with a staff of seven in an office with no power, no computers, and no vehicles.⁴⁵

The distribution of revenue to local development projects has, however, no structure, and this function has yet to be built (nor is it clear what happened to the designated funds). Therefore, although the fund raised awareness of the need for rubber development revenue to be shared with local communities, if it was designed to avoid a low-capacity, opaque, corrupt, and unaccountable general budget process, it failed.

In summary, although the RPTF generated awareness of rubber's cross-cutting importance and made some progress toward reform, the trust and consensus building seem to have been only partial, or at least short-lived. The executive order, for example, satisfied immediate security concerns, but the reallocation of interim management teams solely to the (private) Rubber Planters Association offered new opportunities for rent

seeking. Some within UNMIL close to the process expressed concern about the corruption associated with the use of rubber management allocation for patronage, unclear legal rights on some of the concessions, conflicts with local communities, and UNMIL involvement on some plantations, which ran the risk of legitimizing “what was clearly some very dirty business.” Further, an exception to the export ban on raw rubber was, without explanation, granted to Cavalla plantation—near the Côte d’Ivoire border, and with a subsidiary that has a processing plant just over the border—thereby undermining the explicit goal of fostering local value-added processing.

The executive order has expired and sources say there is little sign that it will be renewed, at least as long as buyers appear to be unaware of its expiration and continue to respect the five-mile buffer zone around competitors’ plantations. There also appears to be little appetite for wide-ranging reforms such as a systematic concession review, a competitive allocation process, or forming a fund to strengthen the Rubber Development Authority.⁴⁶

Improved state control on Guthrie plantation

On Guthrie plantation the RPTF established a security post and persuaded ex-combatants to apply for formal employment at the plantation, enroll in job training, or take alternative jobs in construction (including work to improve basic facilities for tappers and surrounding communities). UNMIL reported in 2006 that commanders’ control of the rank and file weakened because they now had alternative livelihoods. The plantation paid taxes and social security for its workers.⁴⁷ (In 2009 some 100 ex-combatants were still employed on the plantation, but the commanders had withdrawn.)

The RPTF reports that on Guthrie plantation it was successful in its aims to:

- Strengthen security, formalize the sector, and in the process regain some measure of government control in and around the plantations and of the rubber sector more generally.
- Weaken combatant command networks by offering formal employment or alternative livelihoods to illegal occupants.
- Improve government collection of rubber revenue.
- Clarify concession and management agreements.
- Enforce prohibitions on slaughter tapping, improve plantation management, and address environmental degradation from waste and pollution.

A 2009 report by the UNMIL DPKO section responsible for reintegration, rehabilitation, and recovery (RRR)⁴⁸ noted, “Senior UNMIL officials emphasized that emergency employment programs created political space for the mission to achieve its objective of stabilizing rubber plantations and shoring up government control of natural resources.”⁴⁹ The report also found that one of the primary reasons for the RPTF’s success was “the advocacy role that RRR played within the Mission, with donors (especially the World Bank), and with the national Government in linking security with employment.”⁵⁰

Women did not benefit, however, because these programs were in road repair and construction. Although the UN attempts to include women in its employment and training programs,⁵¹ a tension remains from the combined effect of efforts to include women, the ease in creating jobs through construction, and the particular role of young men in creating security threats. Men thereby secure unequal benefits for themselves from employment, training, and income opportunities. This gender imbalance may arguably be a “necessary evil” in projects with an explicit security focus during the immediate postconflict phase, but it should be openly acknowledged and addressed in other projects that have the primary goals of development, recovery, and poverty reduction.

The 2009 report further finds that the Liberian experience, particularly in dealing with the occupation of rubber plantations, demonstrated the need for systematic engagement of security and peacekeeping agencies with ex-combatants as they reintegrated:

[M]any reintegration tasks are relevant to the peacekeeping function and mandate of a Mission... [including] countrywide reach of the mission (that is, ‘mission mobility’), protection of civilians, extension of state authority, assistance with proper management of natural resources, and addressing regional concerns linked to re-recruitment of ex-combatants. Ex-combatant reintegration, therefore, is not an activity that a UN Mission can delegate to development partners alone; because of the political importance and sensitivity of the reintegration process, active DPKO engagement is critical to success.⁵²

Unsuccessful attempt at state control on Sinoe plantation

The state failed to establish control on Sinoe plantation, in contrast to Guthrie. UNMIL sources attribute this to a variety of complications. It was unclear who owned the concession. The plantation is under claim by the politically powerful Americo-Liberian family of former President Tolbert, who, according to international advisers in the country, are reportedly at odds with communities surrounding the plantation. Local courts seem unwilling to rule on who the rightful owners are. UNMIL was unwilling to engage when ownership remained unclear.

Distance added to complications. The plantation is far from the capital, on roads that are impassable in the rainy season. Local government corruption (perhaps due to remoteness from the capital) also presented a serious obstacle to asserting the rule of law. For example, the former superintendent himself repeatedly attempted to impose his own management team and began collecting his own “tax” of \$250 a tonne. One observer close to the RPTF said that although Sinoe plantation was “not [the] reign of terror” as some had portrayed it, corruption and lawlessness made it resemble “the Wild West,” especially when the price of rubber was high in 2006, and much money could be made with law enforcement absent.

These issues became less serious, though, when squatters left the plantation after a steep drop in rubber prices,⁵³ which reduced the profitability of rubber tapping and rubber crime. Some ex-combatants entered alternative livelihood programs such as infrastructure construction, while others simply drifted away to the illegal mining in nearby Sapu National Park or into illegal small-scale logging (pit-sawing).

A temporary reprieve?

The RPTF tackled urgent security issues on six rubber plantations but ultimately failed to deliver on its potential to facilitate long-term sector reforms that would have contributed to durable peace, improved livelihoods, and sound and equitable resource management. As one observer close to the situation put it, “What happened was probably the best of a whole bunch of bad possible outcomes. Security on the plantations definitely improved, but corruption definitely did not.” The lack of an institutional framework to work on longer term issues and the lack of political will or external pressure in this direction precluded any durable reform. In short, the RPTF dealt with symptoms but not causes, which it apparently viewed as outside its security mandate, while political will on all sides seemed to largely evaporate in the wake of falling prices and subsequent withdrawal from the plantations by the ex-combatants.

As rubber prices have now recovered, pressure to act will certainly return. Gaps in reform—such as the expiry of the executive order, the exception to the raw rubber export ban, and the lack of funding to the Rubber Development Authority—pose significant obstacles to revenue and product tracking and to the security of the sector. Indeed, a 2010 UNMIL report sums up well:

Government revenues have increased with recovery of global rubber prices in 2010, although higher prices have also triggered increases in rubber theft and related violence. The private takeover of Guthrie Plantation brought renovations to the plantation and increased employment opportunities. In July, however, some community members protested against what they claimed was inadequate compensation for farm land to be subsumed within the concession area, and concerns are increasing that new challenges may emerge for the plantation. The operation of an effective interim management team at Sinoe Plantation remained a challenge and there is a risk that recent gains toward normalizing the situation there could be reversed.⁵⁴

WORKING TOWARD “GREEN” REINTEGRATION IN ACEH

Postconflict and post-tsunami reconstruction needs have put significant pressure on the abundant natural resources of Aceh, already threatened by poverty-related illegal logging.⁵⁵ The province has the largest tracts of remaining high-biodiversity forests in western Indonesia (second in the nation after Papua) and is home to valuable timber species. It also contains numerous endangered species of animal. Ironically, prolonged violent conflict in Aceh actually aided forest protection, as industrial and community logging halted as forests became militarized zones and people were afraid or forbidden by the government to venture into them.

After the 2005 Helsinki Peace Agreement, however, logging surged because people’s movements became much less restricted, and many rebel fighters, who were formerly supported by illegal levies known as “patriotic taxes” (*pajak nanggroe*) and accustomed to operating in illegal sectors, turned to illegal logging for income. At the same time, demand for wood for post-tsunami reconstruction was massive and investors were readily available. Abundant forests, cheap labor, ready capital, and high demand, coupled with weak law enforcement and rampant corruption, combined into a “perfect storm” of illegal forest destruction.

Systematic forest data are hard to find in Aceh. Nearly all logging information is anecdotal, derived from newspaper reports of wood seizures or field reports from the huge conservation area (2.5 million hectares, some 40 percent of the entire province), which in 2007 was monitored by just 29 field guards.⁵⁶ Nevertheless, this information suggests that logging did indeed increase after the peace agreement, as does field monitoring by the Leuser International Foundation.⁵⁷

The increase in logging stemmed from post-tsunami reconstruction demand, although many homes were also destroyed during the war. Total wood demand for just the homes destroyed by the tsunami was estimated at 325,000 cubic meters of sawn timber and plywood or 650,000 cubic meters of whole logs.⁵⁸ The annual allowable cut for 2005 in Aceh was only 50,000 cubic meters, amounting to a shortfall of 600,000 cubic meters for houses alone.

Environmental activists attempted to ensure that reconstruction timber was sourced from confiscated⁵⁹ or imported wood to avoid a destructive and illegal deforestation cycle. They secured buy-in from many international nongovernmental organizations. In August 2006, 12 containers of donated plywood and lumber (although only 360 cubic meters of wood) were imported for reconstruction.⁶⁰ This procurement system was, though, voluntary and unaudited. Efforts to keep reconstruction demand from driving local deforestation were therefore largely without success in controlling wood supply for reconstruction.⁶¹

Given the strong pressure on the natural assets of the province, Governor Yusuf Irwandi (a former GAM commander) adopted an environmental stance when he became governor, linked to his “Green Aceh” vision. He declared a temporary moratorium on all logging and signed implementing legislation on June 6, 2007.

Some high-profile efforts at enforcement were then made, but wood was often seized without any perpetrators, suggesting that those involved had been tipped off. Many activists complain that law enforcement too often takes what they wryly call a “selective cutting” approach. It targets small operators and the lowest rungs of the larger operations—the “fallers” and transport labor—leaving influential financial and political backers undisturbed. Although wood seizures and arrests often make the newspapers, there are few reports of subsequent court cases. Many of these arrests never result in prosecutions; activists refer to the many possible points at which the cases can be manipulated through bribes and pressure.⁶² The persistent problem of failure to convict illegal loggers is widespread enough that the former Minister of Forestry, M.S. Kaban,⁶³ and later President Yudhoyono himself⁶⁴ called for a Supreme Court investigation into judges who have acquitted defendants or dropped illegal logging charges.

The challenge of reintegration

“Reintegration” of ex-combatants is a concept that fitted poorly with the experience of combatants in Aceh, most of whom never left their home communities. Reintegration came to be understood as benefits and compensation, but early planning was lacking for precisely what the benefits would be or who would receive them, which produced struggles that frequently boiled over into violence that many feared threatened the peace. Ex-combatant reintegration posed special challenges for building a peacetime economy.

One primary obstacle to reintegration was a problematic interpretation of the provisions of the 2005 peace agreement and an opaque process for identifying its beneficiaries, complicated by divergent views on the purpose of reintegration. Some central government officials and key foreign advisers to the Aceh Reintegration Agency⁶⁵ rejected the idea that reintegration was reparation for ex-combatants. Instead, they envisaged the reintegration funds as supporting long-term peacetime livelihoods. Others in government accepted the idea – and indeed most of the post-conflict assistance programs were designed as individual-based compensation schemes (including funds for about 3,000 ex-GAM combatants). For their part, leaders of KPA (Komite Peralihan Aceh – Aceh’s Transition Committee, a veteran organization formed by GAM’s former military wing to represent the rights of ex-combatants) felt they were certainly entitled to cash compensation for losses due to the conflict but also to land and social security.⁶⁶ Partly because of these different interpretations, the program responded to problems in an ad hoc fashion, rather than through careful coordination with civil society or with those with postconflict expertise.

In its early days, the program led, perhaps understandably, to many missteps. Ex-combatants felt deprived of benefits by their commanders, and noncombatant community members felt that commanders received undue rewards for taking part in violence against them. The Aceh Reintegration Agency was also accused by some of widespread corruption and nepotism. In the face of such a highly charged environment and entrenched corruption, Governor Irwandi’s moratorium on lootable resource revenue such as logging represented a bold (if not unrealistic) step. But the moratorium was just one part of his new administration’s comprehensive plan for forest sector reform. It was declared to provide time for the local forestry agency to reassess the zoning of the provincial forest estate and rewrite forestry legislation. Only then would the moratorium be lifted, and only for community forestry operations, not industrial concessions.⁶⁷

Irwandi’s ambitious plans for forest protection faced difficulties early in implementation. With enabling legislation that granted provincial authority over Aceh’s forests, his approach departed from past practices which centralized control of Aceh’s resources in Jakarta. The move to cut out industrial commercial forestry, and hence its many powerful beneficiaries in government and security agencies, met with strong resistance from the capital. The governor sought to establish a difficult balance among the multiple demands for economic development, ex-combatant resettlement, poverty reduction programs, and forest protection. In particular, the enforcement of logging legislation remained a formidable problem because during the conflict, law enforcement was compromised by cooperation between warring parties—the army, police, and GAM loggers—to extract timber illegally. Any involvement of law enforcers in illegal activities clearly complicated implementation of the moratorium.

But the biggest challenge to the moratorium’s success was the ability to enforce it against KPA’s own powerful logging interests, which seemed to believe that this was what GAM had been fighting for—a chance for Acehese to benefit from the province’s rich resources.

Ex-combatants hired as forest guards

The need for employment in post-conflict Aceh is enormous, and the challenges of protecting vast areas of enormously valuable forests are commensurately daunting. In these respects, post-conflict interests

have converged. By early 2010, the Government of Aceh had recruited some 2,000 former fighters as forest rangers,⁶⁸ to patrol the forest trails they once walked as soldiers. Additionally, Fauna and Flora International's Community Ranger Program, using funds from the World Bank MultiDonor Fund and USAID, recruited and trained four teams of forest rangers to provide alternative employment to ex-combatants, exillegal loggers and exwildlife poachers.⁶⁹ This approach could address livelihood and forest monitoring needs, and contribute to the obsolescence of combat command networks that have been relied on for economic opportunity. The key, of course, will be to ensure that the rewards of being a ranger outweigh those of selling illegal timber. Equally important will be ensuring that these benefits and partnerships also involve not just ex-combatants but other community members as well, so that they are sufficiently empowered and motivated to collaborate in protecting Aceh's forests.

REFERENCES

- Aceh World*. 2006. "The Fruits of Deforestation in Leuser." January 31–February 6, Vol. 01 No. 006. Banda Aceh.
- Agence France Presse. 2007. "Minister questions release of illegal logging suspects." April 28.
- ANTARA. 2010. "Forestry Crackdown Under Way, Investigator Declares." April 24.
- Blore, Shawn. 2007. *Land Grabbing and Land Reform: Diamonds, Rubber and Forests in the New Liberia*. Occasional Paper No. 17. Ottawa: Partnership Africa Canada.
- Blundell, Arthur G. 2010. "The Financial Flows that Fuel War." Working Paper (June). Washington, DC: PROFOR.
- Collier, Paul. 2002. "Aid, Policy and Growth in Post-Conflict Countries." Dissemination Notes No. 2. World Bank Conflict Prevention and Reconstruction Unit, Washington, DC. Available at <http://siteresources.worldbank.org/INTCPR/214578-1111751313696/20480205/AidPolicyGrowthNote2.pdf>
- DPKO (UN Department of Peacekeeping Operations). 2010. "Second Generation Disarmament, Demobilization and Reintegration (DDR) Practices in Peace Operations." New York: United Nations.
- EIA (Environmental Investigation Agency) and Telapak. 2007. *The Thousand Headed Snake: Forest Crimes, Corruption and Injustice in Indonesia*. Warwickshire, UK: Emmerson Press.
- Farah, Douglas. 2010. "Transnational Crime, Social Networks and Forests: Using natural resources to finance conflicts and post-conflict violence." Working Paper. PROFOR (Program on Forests), Washington DC.
- FAO (Food and Agriculture Organization of the United Nations). 2005. "Assessment of Timber Demand and Supply for Post-Tsunami Reconstruction in Indonesia." Rome: FAO. April 21.
- Gumay, Dewa. 2006. "Catatan Akhir Tahun 2006, Tahun Krisis Ekologi". ["2006 Year End Notes: a Year of Ecological Crisis"] WALHI (Indonesian Forum for Environment), Aceh, Indonesia.
- Harwell, Emily. 2009. *Wild Money: The Human Rights Consequences of Illegal Logging in Indonesia*. New York: Human Rights Watch.
- . 2010. "Forests in Fragile and Conflict-Affected States." Working draft. PROFOR (Program on Forests), Washington, DC.
- Hill, Richard, Gwendolyn Taylor, and Jonathan Temin. 2008. *Would You Fight Again? Understanding Liberian Ex-Combatant Reintegration*. Special Report No. 211. Washington, DC: United States Institute of Peace, p. 1 (cited in McMullin 2009).
- Humphreys, Macarten, and Jeremy Weinstein. 2004. "What the Fighters Say: A Survey of Ex-Combatants in Sierra Leone: June–August 2003." PRIDE (Post-conflict Reintegration Initiative for Development and Empowerment). Available at www.columbia.edu/~mh2245/SL
- Indonesian Corruption Watch. 2002. "Lifting the Lid of Indonesia's Judicial Mafia." Jakarta.

- International Crisis Group. 2007. "Aceh: Post-conflict Complications." Asia Report No. 139. Brussels.
- Jordan, Michael. 2009. "The Liberian Rubber Market Reform, Update." UNMIL RRR (UN Mission in Liberia, Reintegration, Rehabilitation and Recovery Section) consultant report.
- Kuru, George. 2005. "FAO Assessment of Timber Demand and Supply for Post Tsunami Construction in Indonesia." Rome: FAO (Food and Agriculture Organization).
- Leuser International Foundation. 2006a. "Hasil Dokumentasi Pemantauan Aktivitas Illegal Di Propinsi NAD dan Sumatera Utara Tahun 2006." Banda Aceh, Indonesia.
- . 2006b. "Laporan Pemantauan Aktivitas Illegal Di Dalam Dan Sekitar KEL, Januari - Desember 2006." Banda Aceh, Indonesia.
- . 2007. "Laporan Pemantauan Aktivitas Illegal Di Dalam Dan Sekitar Kawasan Ekosistem Leuser, Juni 2007." Banda Aceh, Indonesia.
- . 2010. "Aceh Forest & Environment Project." Quarterly Report No. 1. Leuser International Foundation, Fauna and Flora Foundation, Multi-donor Fund for Aceh and Nias, Banda Aceh, Indonesia. Available at http://www.leuserfoundation.org/download/AFEP_Quarterly_Report_1_2010.pdf
- McMullin, Jareme R. 2009. "UNMIL Reintegration, Rehabilitation and Recovery (RRR) Section: Lessons from DPKO Involvement with Ex-Combatant Reintegration" New York: DPKO.
- Rakyat Aceh*. 2007. "Firm action will be taken against KPA members involved in illegal logging." July 3. Banda Aceh.
- Serambi*. 2007a. "Dishut Rekrut 1.000 Jagawana." June 7. Banda Aceh.
- . 2007b. "Involved in Illegal Logging, four police officers in custody." July 6. Banda Aceh.
- . 2007c. "60 warga Mane minta kapolsec dibebaskan." July 10. Banda Aceh.
- Simamora, Adianto P. 2010. "Taskforce Sets Sights on Illegal Logging Mafia Allegations." *Jakarta Post*, April 19.
- Tamagnini, Andrea. 2009. End of Assignment Report: 27 August 2009, Annex IV: Joint Government Of Liberia–United Nations Mission In Liberia UNMIL Rubber Plantation Task Force, 2006–2009, UNMIL Final Report.
- UNEP (United Nations Environment Programme). 2004. *Desk Study on the Environment in Liberia*. Switzerland.
- UNMIL (United Nations Mission in Liberia). 2006a. Report of the Joint UNMIL Government of Liberia Rubber Task Force, presented to President Ellen Johnson Sirleaf, 23 May.
- . 2006b. "Human Rights in Liberia's Rubber Plantations: Tapping into the Future." Monrovia. May.
- UN Security Council. 2000. "Report of the Panel on UN Peace Operations." A/55/305 S/2000/809. New York.
- . 2005. "Report of the Panel of Experts submitted pursuant to paragraph 8 (e) of Security Council resolution 1579 (2004) concerning Liberia." S/2005/360, June 13. New York.
- . 2010. "Twenty-first progress report of the Secretary-General on the United Nations Mission in Liberia." S/2010/429, August 11. New York.
- Weinstein, Jeremy. 2005. "Disentangling the Successful Determinants of Demobilization and Reintegration." Working Paper 67. Center for Global Development, Washington, DC.
- Whiteman, Adrian. 2005. "FAO Discussion Note: Feasibility Of Introducing A Chainsaw Lumber Permit In Liberia." Rome: FAO (Food and Agriculture Organization of the United Nations).
- World Bank. 2002. "World Bank Group Work in Low-Income Countries Under Stress: A Task Force Report." Washington, DC, p. 12.
- . 2005a. "Fragile States—Good practice in Country Assistance Strategies." Washington, DC: Operations Policy and Country Services.
- . 2005b. "Toward a Conflict Sensitive Poverty Reduction Strategy: Lessons from Retrospective Analysis." Report No. 32587. Washington, DC.
- . 2007. "Strengthening The World Bank's Rapid Response And Long-Term Engagement In Fragile States." Operations Policy and Country Services Fragile States Group, Washington, DC. Available at http://siteresources.worldbank.org/INTLICUS/Resources/388758-1094226297907/Strengthening_World_Banks_Rapid_Response_and_LongTerm_Engagement_in_Fragile_States.pdf

WWF (World Wildlife Fund). 2007. "Recent Progress on Timber for Aceh Program." August 11. Available at www.worldwildlife.org/forests/projects/aceh-2006augupdate.cfm Accessed June 27, 2007.

NOTES

- 1 Lootable resources are those that are extractable with low technology, available over large, diffuse areas, easily transported, and are able to persist even after long periods of neglect during conflict.
- 2 Blundell 2010; Farah 2010. (Edited versions of both appear in this book.)
- 3 DPKO 2010, p. 15.
- 4 World Bank 2005a, p. 14.
- 5 World Bank 2005b, p. 31.
- 6 World Bank 2005b, p. 34.
- 7 For example, even though the UN Security Council had sanctioned timber from Liberia, the first donors' conference after the signing of the Comprehensive Peace Agreement did not even include forestry on the agenda.
- 8 Blundell 2010.
- 9 The need to improve governance of revenue from primary commodities to reduce conflict is in "Key LICUS Propositions" (Proposition 9), World Bank 2002, p. 12.
- 10 UN Security Council 2000.
- 11 Blundell 2010.
- 12 Hill, Taylor, and Temin 2008, p. 1 (cited in McMullin 2009, p. 17).
- 13 In Liberia, the UN Panel of Experts estimated that about 40 percent of assault rifles and machine guns were turned in (based on comparison with serial numbers from known arms shipments). The Panel regarded these weapons a particular threat because they were newer and more serviceable. A separate analysis by the Panel using continuous serial numbers of new weapons produced higher estimates: only 25 percent of new AK-47s and 53 percent of rocket-propelled grenades were turned in. Although rules required ex-combatants in Liberia to disarm with functional weapons, some ex-combatants were it seems permitted to enter the process with ammunition or nonfunctional weapons. Weapons caches were reported following the disarmament, although the Panel concluded that many had been moved to Guinea and Côte d'Ivoire (UN Security Council 2005 2005, paras. 51–67).
- 14 Disarming with something other than functional weapons may not necessarily result in a continued ready supply of weapons in-country if it is done either to expand disarmament benefits beyond those who were actual combatants (that is, to friends and family members) or to return/sell functional weapons to patrons outside the country.
- 15 DPKO 2010.
- 16 Humphreys and Weinstein 2004; Weinstein 2005.
- 17 Humphreys and Weinstein 2004; Weinstein 2005.
- 18 World Bank 2007; Collier 2002.
- 19 DPKO 2010, p. 15.
- 20 Blundell 2010; Harwell 2010.
- 21 Whiteman 2005.
- 22 FAO 2005, p. 27.
- 23 In addition, high rubber prices in 2006–08 meant that Liberian processors were competing with international processors. These processors imported raw Liberian rubber through thousands of middlemen who traded raw rubber to places as distant as Singapore.
- 24 UNMIL Force Commander (Arthur Blundell, personal interview as Chair of UN Panel of Experts).
- 25 UNMIL 2006a.
- 26 UNEP 2004, p. 33, cited in UNMIL 2006b.
- 27 <http://faostat.fao.org>.
- 28 Tamagnini 2009.
- 29 Author interviews with UNMIL field staff closely following developments on the plantations; Blore 2007, p. 14.
- 30 Blundell 2010; Farah 2010.
- 31 UNMIL 2006b, p. 76.
- 32 UNMIL 2006a.
- 33 Petition for a Writ of Prohibition, February 2, 2005, the Judicial Branch of the Republic of Liberia (Honorable John L. Greaves, Supreme Court Associate Judge presiding), cited in UNMIL 2006b, p. 25.
- 34 Tamagnini 2009.
- 35 Arthur Blundell, personal communication.
- 36 UNMIL 2006a; UNMIL 2006b.
- 37 McMullin 2009, p. 12.
- 38 This claim seems to be a liberal interpretation of Article VI.6 of the Comprehensive Peace Agreement:

- "All combatants shall remain in the declared and recorded locations until they proceed to reintegration activities or training for entry into the restructured Liberian armed forces or into civilian life." (However, many of the ex-combatants occupying the plantation had not registered.)
- 39 Blundell 2010.
- 40 The Technical Committee of GEMAP reportedly did raise questions on the sole sourcing of interim management teams for Guthrie and Cavalla to the Rubber Planters Association of Liberia (RPAL) – questions that seem not to have produced any action by government or donors.
- 41 Jordan 2009, p 2.
- 42 The Liberian Forest Initiative also involved close coordination of an array of government and donor community agencies, but not to the same extent as the RPTF.
- 43 Jordan 2009.
- 44 Jordan 2009.
- 45 Jordan 2009, pp. 3–4.
- 46 One observer, however, reports that there has been some progress in improving the terms of individual concession agreements, for example the Firestone agreement, which offers some cautious optimism. Nevertheless, "serious capacity issues" remain in the government's ability to negotiate and it is unclear how advantageous the new terms are for local tappers and communities.
- 47 UNMIL 2006a.
- 48 Having a section devoted to reintegration within DPKO in Liberia was novel, as DPKO traditionally is only engaged in disarmament and demobilization, leaving reintegration to the United Nations Development Programme and other partners.
- 49 McMullin 2009, p. 5.
- 50 McMullin 2009, p 6.
- 51 Teresa Krafft (UNMIL Associate DDR Officer), personal communication, November 9, 2010.
- 52 McMullin 2009, pp. 6–7.
- 53 Prices dropped immediately after the executive order was issued, then slowly climbed back until late 2008 when they plunged again. Prices are now back at their 2008 peak (\$3.55/kg).
- 54 UN Security Council 2010.
- 55 This section draws primarily on field research and interviews carried out by the author for International Crisis Group 2007.
- 56 Author interviews, Leuser International Foundation staff, Medan, May 25, 2007. There were, though, plans to recruit 1,000 new forest guards (Serambi 2007a).
- 57 The Leuser International Foundation 2006 reports show that, of the 612 cases documented by just 29 field staff, over 8,900 tons of wood were cut illegally in the Leuser conservation area. These data are supported by the reports that police seizures of illegal wood in 2006 were up 200 percent from 2005, from 33,250 cubic meters to 120,210 cubic meters (Leuser International Foundation 2006a, b, 2007; Gumay 2006).
- 58 Kuru 2005, p. 27.
- 59 M. Arman Mallolongan, National Conservation and Parks Department, reported national figures of 30,000 cubic meters confiscated lumber and some 460,000 cubic meters of roundwood available in July 2006. "Potensi dan peluang kayu sitaan, temuan, rampasan dan kayu rebahan yg tersedia di seuruh Indonesia umumnya dan Aceh khususnya beserta kajian status hukumnya" ["Potential and legal status of seized, abandoned, and fallowed timber available throughout Indonesia and in Aceh specifically"]. Unpublished report.
- 60 WWF 2007.
- 61 Author interview, international advisers, Banda Aceh, May 11, 2007; Lesley McCulloch, Environment Organization for Asia, May 19, 2007.
- 62 EIA and Telapak 2007; Indonesian Corruption Watch 2002; Harwell 2009.
- 63 Agence France Presse 2007.
- 64 ANTARA 2010; Simamora 2010.
- 65 Author interview, Leroy Hollenbeck, Special Advisor to the Governor, Banda Aceh, May 2007.
- 66 Author interviews with Leroy Hollenbeck (Banda Aceh) and KPA commanders Machsalmina (Banda Aceh), Abrar Muda (Tapaktuan), and Fauzan Azima (Banda Aceh), May 2007.
- 67 Haniffa Affan, Provincial Forestry Department Head, statement to a conference on "Moratorium Logging dalam Perspektif Rekonstruksi Aceh" held by WALHI, May 12, 2007, Banda Aceh.
- 68 Matthew Linkie, Program Manager, Fauna and Flora International, Banda Aceh., Pers. Com. Jan 21, 2011.
- 69 Ibid.

FORESTS, FRAGILITY AND CONFLICT IS A COLLECTION OF BACKGROUND PAPERS THAT HELPED INFORM THE 2011 WORLD DEVELOPMENT REPORT ON CONFLICT AND DEVELOPMENT. IT OFFERS A BROAD SYNOPSIS OF THE MAIN LINKS BETWEEN VIOLENCE, POOR GOVERNANCE AND FORESTS, BACKED BY CASE STUDIES SPANNING LATIN AMERICA, AFRICA AND ASIA.

ALTHOUGH FORESTS TEND TO BE AT THE CENTER OF MAINLY LOCALIZED, NONVIOLENT STRUGGLES FOR ACCESS AND USE, FORESTS CAN ALSO FACILITATE AND PROLONG CONFLICT – PARTICULARLY THROUGH CORRUPTION AND LOOTING OF FOREST TIMBER. FORESTS THEMSELVES MAY BE AT RISK IN THE IMMEDIATE AFTERMATH OF CONFLICT, WHEN MYRIAD DEMANDS – FROM GOVERNMENT, LOCAL POPULATIONS, COMMERCIAL TIMBER OPERATIONS, AS WELL AS DONORS – GO UNCOORDINATED. IT IS THE WRITERS' HOPE THAT THIS VOLUME'S ANALYSIS, CASE STUDIES, AND LESSONS WILL HELP POLICY MAKERS, OFFERING SOME UNDERSTANDING OF THE REASONS FOR THE REPEATED CYCLES OF VIOLENCE AND GUIDANCE ON MANAGING FORESTS IN A POST CONFLICT CONTEXT.



PROFOR

PROGRAM ON FORESTS (PROFOR)

THE WORLD BANK
1818 H ST NW
WASHINGTON DC 20433 USA
TEL: + 1 202 473 5844
FAX: + 1 202 522 1142

EMAIL: PROFOR@WORLDBANK.ORG
WEBSITE: [HTTP://WWW.PROFOR.INFO](http://WWW.PROFOR.INFO)

Profor is a multi-donor partnership supported by:

