



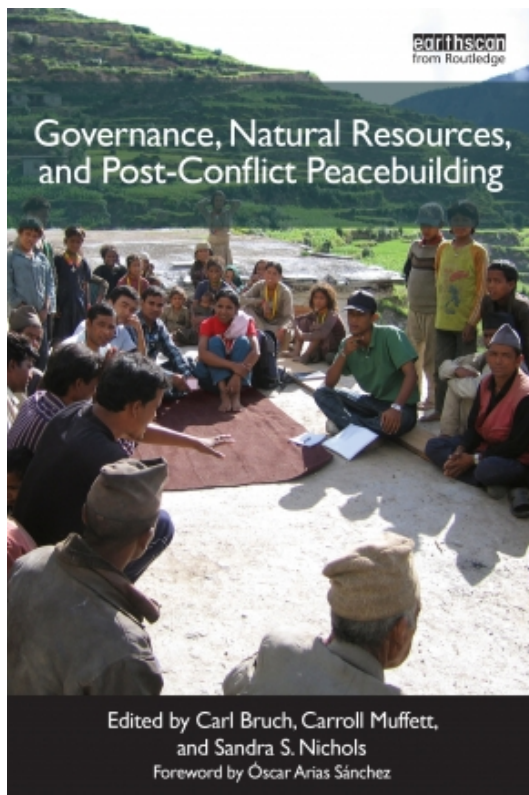
東京大学
THE UNIVERSITY OF TOKYO



McGill

This chapter first appeared in *Governance, Natural Resources, and Post-Conflict Peacebuilding* edited by Carl Bruch, Carroll Muffett, and Sandra S. Nichols. It is one of six edited books on Post-Conflict Peacebuilding and Natural Resource Management. (For more information, see www.environmentalpeacebuilding.org.) The full book can be purchased at <http://environmentalpeacebuilding.org/publications/books/governance-natural-resources-and-post-conflict-peacebuilding/>.

© 2016. Environmental Law Institute and United Nations Environment Programme.



Facilitating Peace or Fueling Conflict? Lessons in Post-Conflict Governance and Natural Resource Management

Carl Bruch^a, Lydia Slobodian^b, Sandra S. Nichols^c, and Carroll Muffett^d

^aEnvironmental Law Institute (ELI)

^bInternational Union for the Conservation of Nature (IUCN) Environmental Law Center

^cEuropean Forestry Institute (EFI)

^dCenter for International Environmental Law

Online publication date: 30 November 2016

Suggested citation: C. Bruch, L. Slobodian, S. S. Nichols, and C. Muffett. 2016. Facilitating Peace or Fueling Conflict? Lessons in Post-Conflict Governance and Natural Resource Management, *Governance, Natural Resources, and Post-Conflict Peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.

Terms of use: This chapter may be used free of charge for educational and non-commercial purposes. The views expressed herein are those of the author(s) only, and do not necessarily represent those of the sponsoring organizations.

PART 8

Lessons learned

Facilitating peace or fueling conflict? Lessons in post-conflict governance and natural resource management

*Carl Bruch, Lydia Slobodian,
Sandra S. Nichols, and Carroll Muffett*

Natural resources are central to national economies, group identities, and households livelihoods. Good governance of a country's natural resource endowment can provide the foundation for a transition to a modern economy; bad governance of natural resources—characterized by inequity, corruption, capture, and opacity—can generate grievances leading to armed conflict. Unfortunately, the temptations presented by natural resource wealth often fuel bad governance, a dynamic known as the “resource curse” (Mehlum, Moene, and Torvik 2006; Ross 1999; Van der Ploeg 2011; Hendrix and Noland 2014).¹

Natural resources are an important asset to post-conflict peacebuilding, given the fact that it can often be accessed and exploited more quickly than it takes to rebuild human capacity, transportation and energy infrastructure, or the industrial sector. They have the potential to provide financing and means to recover from conflict, as well as supporting sustainable development over the longer term.

Post-conflict peacebuilding provides a window of opportunity during which a country can reform its laws, institutions, and practices, including those governing natural resources. Indeed, post-conflict peacebuilding at its core seeks to restore and reform governance and thereby establish a foundation for an enduring

Carl Bruch is a senior attorney and co-director of international programs at the Environmental Law Institute. Lydia Slobodian is a legal officer with the IUCN Environmental Law Centre. Sandra S. Nichols is an environmental and natural resources attorney who works to improve governance and accountability, and protect community rights in natural resource-based economic activities. Carroll Muffett is president of the Center for International Environmental Law. The authors are grateful to Samantha Bresler, Heather Croshaw, Akiva Fishman, Liz Hessami, Alex Hoover, David Jensen, Olivia Radics, and Sangmin Shim for their assistance in developing this chapter.

¹ Many of the poorest countries in the world are also the most resource dependent (Okonjo-Iweala 2013). The percentage of GDP attributable to natural resources among least developed countries is more than four times the global average: among least developed countries, natural resource sectors make up on average 19 percent of the GDP, while the global average is 4 percent.

peace. Whether there is an enduring peace depends in large part on whether and how governance reforms are undertaken. This chapter examines the multidimensional relationship between post-conflict governance and natural resource management. A few preliminary observations are necessary before examining the specific approaches and lessons.

Most significantly, different natural resources have varying importance and different governance requirements in post-conflict settings. Each conflict-affected country has a wide range of natural resources, including nonrenewable resources such as minerals and maybe oil and gas; renewable resources such as land, water, forests, fisheries, and biodiversity; and ecosystem services such as flood control provided by wetlands. Not all natural resources are equally important for everyone or for every purpose, and the government and the peacebuilding community have to decide which resources and governance initiatives to prioritize. Many conflict-affected states depend on nonrenewable resources such as oil, gas, and minerals for government revenues and their gross domestic product (GDP), and on renewable resources such as land, water, and forests for livelihoods and food security. In Libya, oil and gas accounted for more than 95 percent of government revenues, but employed only 2 percent of the workforce in 2012 (OECD 2013a).² In Angola, the oil industry is responsible for 90 percent of exports and almost 80 percent of the government revenues, while agriculture employs almost 70 percent of the workforce. Revenue streams associated with certain natural resources (usually primary commodities) may have financed armed groups (UNEP 2009), while groups may be particularly amenable to cooperating around water, protected areas, and other natural resources.

High-value natural resources tend to have three major negative impacts on governance. First, they fundamentally shift decision making from a long-term to a short-term perspective, as elites often try to capture as much of the revenues as possible. Volatility of commodity prices amplifies this phenomenon, as higher prices tend to magnify shorter-term thinking. Second, high-value natural resource endowments and sometimes the investments to exploit strategic natural resources can be worth more than the national GDP, meaning entities associated with those resources have disproportionate political influence and access. The government becomes fundamentally dependent on them, and tends to give those entities preferential treatment compared to entities in other sectors. In the worst cases, high-value natural resources become a fixation and a distraction, and their presence tends to shift political and economic focus away from other existing and potential natural resource sectors, contributing to the phenomenon known as the

² Nonrenewable resources provide 98 percent of government revenues in South Sudan, 84 percent in Iraq, 82 percent in the Democratic Republic of the Congo (DRC), 68 percent in Yemen, and 67 percent in Chad (OECD 2014). In these and most other conflict-affected countries, a majority of the population depends on agriculture, fisheries, and pastoralism for their livelihoods, and in some countries it is more than 70 percent (OECD 2013a; AFDB 2012).

Dutch Disease (Krugman 1987; Van der Ploeg 2011). Third, high-value natural resources contribute to economic and political instability. Volatility in commodity prices creates booms and busts in government revenues, which often translates into over spending and then budget shortfalls. At least as problematic, the government revenues received from high-value natural resources shatter the financial contract between citizens and government that is normally maintained through taxation mechanisms (Hendrix and Noland 2014). As governments become reliant on natural resource revenues, direct accountability to citizens is weakened.

Recognizing the diversity of natural resources, peacebuilding objectives, and governance approaches, it is essential to conduct an initial assessment to identify needs, opportunities, and priorities.³ This assessment should consider:

- (1) the characteristics of the natural resources, including the value-to-weight ratio, quality, and location (proximity to the capital, geographic distribution, whether concentrated in one ethnic region or evenly dispersed, etc.);
- (2) mechanisms and capital intensity of extraction (commercial or artisanal, on-shore or off-shore, overall lootability);
- (3) the existing governance framework (including customary and statutory norms, institutions, and practices governing the respective resources; and the effectiveness and legitimacy of these norms and institutions);
- (4) a political economy analysis of the resources, including consideration of the role that natural resources played in the conflict and in the conflict economy, and the percentage of livelihoods that informally depend on the resource;⁴ and
- (5) the relevance of the various natural resources to peacebuilding objectives.

Empirical analysis has shown, for example, that the presence, location, and type of natural resources can affect the severity of an armed conflict by shaping the incentive structures for both the state and rebel groups (Lujala 2009). Moreover, 48 percent of civil wars in Africa from 2000 to 2010 occurred in areas where access to land was central to rural livelihoods (UNFT 2012a).

In some instance, a post-conflict environmental assessment will highlight how multiple peacebuilding objectives revolve around the effective management of a specific natural resource, such that addressing that particular resource can yield substantial peace dividends. This is often the situation with natural resources of strategic importance, such as minerals in eastern DRC or forests in Liberia.

There is no universal approach or solution to governing natural resources after conflict, and context is essential. The governance measures that are necessary to regain control of a natural resource sector financing armed conflict will

³ On assessment, natural resources, and post-conflict peacebuilding, see Jensen and Lonergan (2012).

⁴ On the political economy of natural resources and post-conflict peacebuilding, see, for example, Wennmann (2005, 2007, 2011).

be likely different than those measures necessary to restore rural livelihood which in turn will be different from those measures necessary to provide water, sanitation, and other basic services.

To reduce the risk of conflict relapse, it is critical that natural resources be addressed in the peacebuilding process (Webersik and Levy 2016*).⁵ Conflicts associated with natural resources are more likely to suffer relapse years, and they relapse twice as quickly (Rustad and Binningsbø 2010). Moreover, typically 40 to 60 percent of internal armed conflicts ongoing in any particular year over the last sixty years have been linked to natural resources.

Post-conflict governments typically must deliver on a suite of core priorities, all of which have natural resource dimensions and depend on governance measures. They have to build a shared national vision for peace and foster national reconciliation, which may include transitional justice mechanisms. They need to resolve resource-linked disputes (such as those related to distribution of land or allocation of oil revenues). They need to restore water, sanitation, energy, and other basic services. They need to reintegrate internally displaced persons (IDPs), refugees, and excombatants. They have to rebuild the economy and generate government revenues, restoring markets and exports, attracting investment, issuing concessions, and transforming informal and illicit commercial activities into the formal sector, so they can be taxed. Finally, they need to address grievances, inefficiencies, and lack of protection of resource rights.

Depending on the legal, social, economic, conflict, and environmental contexts, addressing these priorities usually entails a combination of substantive and procedural governance measures. Substantively, it is often necessary to amend or draft anew the laws, regulations, policies, and procedures governing land, minerals, forest, water, and grazing. Procedurally, there are often reforms to enhance transparency, participation, and accountability, as well as use of legal pluralism to engage customary and religious institutions.

Just as governance capacity is often weak at many levels and in many sectors, it is essential to focus attention on subnational, local, and customary governance. Many post-conflict governance efforts focus on the national government, and are thus top-down. Given the importance of natural resources to local livelihoods and food security, where natural resources are concerned it is also essential to cultivate bottom-up governance efforts around natural resources (UNEP 2014a; Wennmann 2010).

Once armed conflict has ceased—whether due to a peace agreement, military victory, or otherwise—previously inaccessible resources such as gold, gems, timber, and oil often attracts a rush of foreign investors (Klare 2012). Likewise, there is a political priority to develop mineral, oil and gas, and agricultural concessions as potential sources of government revenues. Accordingly, there is a rapid granting of natural resource concessions, usually without consideration of

⁵ Citations marked with an asterisk refer to chapters within this book.

people holding rights to the land under customary tenure. In less than fifteen years after the end of Sierra Leone's civil war, the government had granted mineral concessions covering more than 80 percent of the country and agricultural concessions covering 20 percent of the arable land (UNFT 2012b). Colombia, the DRC, Liberia, South Sudan, and other countries have similarly seen a rapid growth of natural resource concessions (de Leon et al. 2013; Gurara and Birhanu 2012).

Following the granting of autonomy to South Sudan, foreign companies raced to make deals for mining licenses, negotiating with multiple different institutions including the military and high level government officials, many of whom demanded a private stake in mining projects (Deng, Mertenskoetter, and Vondervoort 2013). The resulting widespread confusion led the Southern Sudan Legislative Assembly in 2010 to declare a moratorium on new mining licenses. With the passage of a new mining act in 2012, the moratorium was lifted, but proliferation of mining licenses continues to cause conflicts between communities, investors, and government over land and resource rights.

The proliferation of post-conflict natural resource concessions in countries around the world has led to widespread claims of land grabbing, which often delay projects, drive up costs, and can even turn violent. The additional costs can be substantial: the Munden Project estimates that land tenure disputes associated with large-scale natural resource concessions can drive up project costs by a factor of 29 (i.e., 2900 percent) (Munden Project 2012).

Governments emerging from conflict are generally more fragile, and have reduced capacity to regulate natural resources, effectively negotiate natural resource concession terms with large multinational firms (whose annual profits may exceed the country's GDP), or resolve disputes over rights to natural resources and their revenues (Okonjo-Iweala 2013; Grundel 2010). The linkages between state fragility and governance capacity are strong: the World Bank has ranked 18 of the 19 fragile states in Africa in the bottom 20 percent of countries globally regarding effectiveness of governance (AFDB 2015).

With funding for public servants in short supply, and ready cash in the hands of potential investors, corruption is often rife. When corruption takes root, bribes can become the primary form of income for government officials, removing internal incentives to reform or improve the laws, institutions, or practices governing natural resources (Besada 2013). Yet, as natural resources enrich some (usually political elites and companies), the neighboring communities struggle with new problems of water pollution, displacement, and food insecurity. This unequal distribution of benefits and burdens undermines government legitimacy and drives social conflict, which can escalate to violent conflict if not resolved—as witnessed in Bougainville, Papua New Guinea and elsewhere (Boege and Franks 2012).

Perhaps the defining characteristic of the post-conflict context is rapid change and uncertainty (Webersik and Levy 2016*). Post-conflict societies are composed of overlapping sets of complex systems in a state of rapid and often radical flux. Changing demographics bring genders, ethnic groups, classes, and communities

into different roles and relationships, creating new tensions and upsetting pre-existing practices and norms. Multiple systems of law and authority conflict and collide, as religious, tribal, customary, national, provincial, municipal, and other legal and institutional systems variously break down or expand (Meinzen-Dick and Pradhan 2016*). International peacekeepers and humanitarian and development workers bring new norms and practices into a field already teeming with private, government, and nongovernmental actors scrambling to reestablish order, respond to emergencies, or protect their own interests (Grundel 2010).

In this unstable, constantly changing context, the government, civil society, and the peacebuilding community face the daunting task of reconstituting (and often renegotiating) the social contract, establishing security and order, restoring the rule of law, providing services, reweaving the fabric of society, and rebuilding livelihoods and the economy. All of these tasks rely on governance—norms, institutions, and practices shaping how people relate to one another and to their government politically, economically, and socially.

Through case studies and cross-cutting thematic analyses, the chapters in this book illustrate a range of approaches and considerations in rebuilding and strengthening the laws, institutions, and practices governing natural resources in countries recovering from conflict. The first section surveys core elements and principles of good governance related to natural resources. The second section examines a range of sources and types of norms governing natural resources, and then focuses on four considerations in normative review, development and reform in post-conflict peacebuilding processes, including clarity, feasibility, legal pluralism, and the tension between local legitimacy and compatibility with internationally recognized human rights. The third section analyzes approaches for building effective and fair institutions governing natural resources. It focuses on the allocation of authority and responsibility, capacity, coordination, international support, equity and inclusion, and the rule of law. The fourth section reviews approaches for establishing good natural resource governance after conflict, examining assessment and planning and then rebuilding governance frameworks. The fourth section examines approaches for governing natural resources in the transition following the cessation of conflict, including peacekeeping, sanctions, administration, justice, and return. The fifth section discusses programming around governance and natural resources. The final section draws out the main conclusions of the chapter.

PRINCIPLES AND COMPONENTS OF GOOD GOVERNANCE

Governance refers to the norms, institutions, and processes by which a nation, society, or group organizes its interactions and affairs.⁶ According to the United Nations, *good governance* is characterized by eight core principles: participation,

⁶ For definitions of *governance* and *good governance*, see Bruch, Muffett, and Nichols (2016)*; see also OECD (2007), UNDP (2007), World Bank (2009), and IMF (2015).

rule of law, transparency, responsiveness, consensus oriented, equity and inclusion, effectiveness and efficiency, and accountability (see box on principles of good governance).⁷

Good governance of natural resources is essential to ensuring good governance more broadly. Inequitable distribution of rights to land, mineral, and forest resources have generated grievances that have been a contributing cause of many armed conflicts (Ross 2004). Corruption in the management of revenues from diamonds, gold, timber, and other resources has undermined the legitimacy of fragile governments (Besada 2013; Cheng and Zaum 2016*). Disputes over use of land and water resources between different pastoral communities and between agricultural and pastoral communities can flare up and create lasting instability (Lind 2015; Alden Wily 2015). Failure to prevent and to resolve these disputes and to adequately manage resources integral to livelihoods and economic growth can undermine confidence in the government. Conflict and corruption over natural resources also squanders important sources of revenue essential to the government's ability to deliver security, utilities, and other services. Natural resources can also provide a source of funding to build armies and finance conflict, which destabilizes governments (Grundel 2010; OECD 2014). Conversely, good governance of natural resources at any level of government can help build trust and capacity, open channels of dialogue, and create conditions for improving governance across other public sectors.

Governance of other public sectors can also affect natural resource management. The design and implementation of political, financial, administrative, and judicial systems affects the structure and effectiveness of natural resource governance—for better or for worse. For example, efforts to fight corruption in post-conflict Liberia through the Governance and Economic Management Assistance Program (GEMAP) helped lay the foundation for fighting entrenched corruption in the forestry sector.⁸ On the other hand, governance failures outside of natural resource sectors can have significant impacts on natural resources and their management. For example, a lack of accountability and rule of law in Myanmar led to widespread land grabbing, illegal timber and mining operations, and other rapacious and unsustainable extraction of the country's natural heritage by military and other elites (Talbot, Akimoto, and Cuskelly 2016*).

Good governance therefore requires addressing the many linkages between governance and natural resources. This entails ensuring both (1) good governance of natural resources (that is good governance within natural resource sectors) and (2) consideration of how governance actions in other sectors (such as financial, trade, taxation, and security) affect governance of natural resources and the environment.

⁷ Commentators and intergovernmental bodies have identified other principles of good governance, including subsidiarity, sustainability, vision, and predictability (Grenfell 2013; UNEP 2013a).

⁸ For more on GEMAP, see discussion below.

960 Governance, natural resources, and post-conflict peacebuilding

This section describes a set of four core governance components: (1) adequate and appropriate norms for managing and regulating natural resource exploitation, access, ownership, and use; (2) legitimate and effective institutions capable of implementing, monitoring, and enforcing these norms and managing conflicts over natural resources; (3) mechanisms and processes to ensure equity, inclusion, and legitimacy in all aspects of governance that relate to natural resources; and (4) mechanisms to ensure rule of law in the context of natural resources. These components represent the overarching goals for efforts to rebuild natural resource governance following conflict, which in turn is essential to the broader range of post-conflict governance and peacebuilding objectives. This section examines the main concepts, approaches, and lessons for each component, and the next section explores lessons from applying these approaches in post-conflict countries.

ADEQUATE AND APPROPRIATE NORMS

Good natural resource governance requires a clear and accessible body of norms setting forth rights and responsibilities that determine how people interact with natural resources and with each other. Norms governing natural resources can take the form of laws, regulations, policies, standards, customs, and processes for allocating and protecting rights, managing conflicts, and regulating use and access (Nichols and Al Moumin 2016*). They include statutory, customary, religious, and institutional norms addressing both substantive and procedural aspects, ranging from constitutional provisions mandating equitable distribution and use of land to traditional practices of sharing and coordinating access to water.

Principles of good governance*

Participation: All relevant and affected individuals and groups are meaningfully involved in decision-making processes.

Rule of law: All persons, institutions, and entities, including the state itself, are accountable to laws that are publicly promulgated, equally enforced, and independently adjudicated, and which are consistent with international human rights norms and standards.

Transparency: The public has access to information about relevant and important decisions, processes, and benefits.

Responsiveness: Institutions and processes try to serve all stakeholders within a reasonable timeframe.

Consensus oriented: Diverse interests are considered in seeking to reach consensus on what is in the best interest of the whole community and how this can be achieved.

Equity and inclusion: Norms and processes are nondiscriminatory in content, impact, and application, and ensure fair allocation of benefits and burdens among all relevant individuals and groups, including marginalized groups and minorities.

Effectiveness and efficiency: Processes and institutions produce results that meet the needs of society while making the best use of resources at their disposal.

Accountability: Individuals and institutions are held responsible for their decisions and actions, regardless of rank or position.

* Adapted from UNSG (2004), UNESCAP (2009), OHCHR (2013b), and UNDP (2014).

The importance of good natural resource governance extends far beyond the natural resource sector. Weak regulations governing natural resources—including the failure to protect rights to resources—can provide opportunities for harmful exploitation and misappropriation of natural resources, which can fuel corruption and damage government legitimacy across sectors (Garrett 2016*). Establishing and implementing clear, appropriate, and workable norms governing natural resources can help a government protect livelihoods, capture revenues, and build legitimacy following conflict.

The analyses in this book and in the broader literature yield four key lessons regarding the characteristics of adequate and appropriate norms for good natural resource governance. Such norms should be (1) clear, comprehensive, and coherent; (2) feasible in the specific social, cultural, economic, and environmental situation; (3) compatible with existing multifaceted and polycentric systems of law and authority, often through the recognition of legal pluralism; and (4) both locally legitimate and compatible with internationally recognized human rights (Nichols and Al Moumin 2016*; Meinzen-Dick and Pradhan 2016*; Zahler et al. 2016*). These are discussed in turn. First, though, it is necessary to consider the appropriate scope of the norms.

Determining the appropriate scope of norms

The breadth of norms governing natural resources and the environment is extensive. There are constitutional provisions, statutes and acts, regulations, policies, executive orders, and standards. There are substantive and procedural norms. There are customary norms and religious norms. There is national law, subnational law, customary law, and international law. There are institutional policies of corporations, banks, and international organizations. There are norms governing different natural resource sectors, such as land, water, mining, fishery, forestry, agriculture, and wildlife. Many norms governing natural resources are found outside natural resource sectors (for example, in laws governing public procurement, taxation, or import/export of goods).

Sometimes, most of the relevant norms are found in a single law and its implementing regulations. More often, the norms are scattered across levels, sectors, and types of instrument.

Which normative requirements to include in a specific legal instrument depends substantially on the particular country and its political, social, economic, environmental, and legal context. The nature of the norms will vary from natural resource to natural resource, and may even vary from one region of the country to another.

That said, most norms governing natural resources and the environment fall into one of five categories: natural resource rights; allocation of natural resources revenues and sharing of other benefits; addressing environmental, social, and environmental impacts of natural resource extraction; authority to make regulatory and other decisions; and procedural aspects. Unpacking these different normative dimensions can be challenging. For example, Iraq's constitution separately

962 Governance, natural resources, and post-conflict peacebuilding

addresses the ownership of the country's oil and gas wealth, authority to make decisions regarding oil and gas, and allocation of oil and gas revenues, but the political discourse generally mixes—and confuses—the three dimensions (Al Moumin 2012).

Protecting rights to natural resources is essential to livelihoods, food security, economic growth, and reconciliation (Garrett 2016*). This is particularly important and challenging following conflict, when land and other resources may be under frequent threat of appropriation by elites, soldiers, and militant groups. However, protecting resource rights following conflict can require disentangling a complex knot of ownership claims exacerbated by a lack of credible public records and by demographic shifts during the war.

In addition to addressing rights to resources, norms govern the distribution of natural resource revenues and sharing of other benefits. There are three primary approaches for structuring revenue allocation (Ross, Lujala, and Rustad 2012). First, through the national budgeting process, natural resource revenues are transferred indirectly to sub-national units as part of the overall national budget. This is the least decentralized of the approaches. Local governments are not required to build the capacity to collect increased taxes. It also has the advantage of insulating localities from natural resource price fluctuations by providing a fixed annual payment. Second, through local taxes, local governments directly tax the extractive industries operating within their jurisdictions. It has the advantage of providing the public in areas that might be susceptible to potential secessionist movements with tangible reassurance in the form of more direct benefits and controls. Third, with a direct transfer of revenues, the national government directly transfers a percentage of resource revenues to the producing locality or region; Sierra Leone's Diamond Area Community Development Fund is an example (Maconachie 2012). This gives local governments less control than a local tax, but can still provide an avenue for populations to demand accountability and transparency from the government as well as benefit more directly from resource extraction (Le Billon 2008). A fourth approach, rarely used, directs revenues straight to local individuals; this approach controls the flow of oil revenue in Alaska (Sandbu 2012).

Natural resource exploitation can generate pollution, environmental degradation, and economic and social impacts to individuals and communities. In such instances, laws governing environmental impact assessment, pollution prevention, land use planning, remediation, and compensation become particularly relevant. In some countries that have long been affected by conflict—such as Afghanistan, Iraq, Myanmar, and Sierra Leone—these are the norms (and institutions) that are often the least developed economically (Talbot, Akimoto, and Cuskelly 2016*; Nichols and Al Moumin 2016*; Brown et al. 2012; Bowling and Zaidi 2015).

Equally important are procedural laws and regulations (Nichols and Al Moumin 2016*). These include, for example, requirements and mechanisms for disseminating and accessing information on the state of natural resources,

allocation of natural resource rights, use of resource revenues, resource exploitation projects and their environmental and social impacts, and requirements for impact assessments or consultations with affected communities before resource exploitation can begin. Such procedural requirements contribute to transparency, inclusion, accountability, and equity both in the natural resource sector, and more broadly. They can also help identify potential disputes, resolve them peacefully, and preempt conflict.

Given the breadth of different norms related to natural resources and the environment, it is important to develop broad public agreement on the priorities for post-conflict natural resource governance activities. Once the priorities are identified, the task of identifying the relevant norms becomes simpler, as does the process for revising the norms (as appropriate), raising awareness, and building capacity for implementation and enforcement.

Clarity, comprehensiveness, and coherence of norms

To be effective, natural resource governance systems must establish clear laws, regulations, and procedures, including norms for allocating, protecting, and transferring natural resource rights; distributing natural resource revenues and benefits; and procedural mechanisms to protect the interests of affected individuals and groups, including through access to information, public participation in decision-making processes, and access to justice (Nichols and Al Moumin 2016*). To be understood—and thus followed—these laws, regulations, and procedures should clearly state to whom they apply, what are the requirements and processes, and the potential incentives and penalties that may apply (UNEP 2006).

Some of the most contested norms governing natural resources are those defining and safeguarding rights to access, use, and own natural resources. In many instances, governments have granted mining, timber, and agricultural concessions that conflict with rights held by others. Often, the conflict is with indigenous peoples and communities who hold customary tenure to their lands. For example, in Colombia, Guatemala, and Peru, governments have granted mining concessions on land legally owned and occupied by indigenous peoples and local communities (RRI 2013). In addition to rights to minerals, these concessions grant mining companies rights to other natural resources, including water, soil, and forests, to the extent necessary for extractive purposes, setting up a conflict between the rights of mining companies and the rights of local communities.

Vague norms can create opportunities for rent-seeking by public officials and other elites, and the lack of clarity can make enforcement difficult if not impossible. In the Democratic Republic of the Congo (DRC), powerful elites took advantage of unclear norms governing mining sector exploitation to generate revenue through cancellation and renegotiation of mining contracts (Garrett 2016*). This deterred foreign investment and harmed artisanal and small-scale mining.

A lack of clear norms—and agreement on which norms (statutory or customary) apply—is a particular challenge for addressing land tenure after conflict (Unruh and Williams 2013). These legal ambiguities have created administrative difficulties and tensions related to land in Aceh (Indonesia), Afghanistan, Angola, Bosnia Herzegovina, Mindanao (Philippines), Sierra Leone, and elsewhere.

In many cases, a substantial cause of the conflicting rights is a failure of the legal framework to be comprehensive or coherent. Often, natural resource laws are adopted and implemented on a resource-by-resource basis, with different laws governing mining, land, agriculture, forestry, and other resources. With a post-conflict priority on rebuilding the economy and generating revenues for government coffers, government agencies have strong incentives to grant as many commercial concessions as possible. The lack of a comprehensive or coherent legal framework for coordinating concessions across different natural resources often leads to overlapping (and as a practical matter conflicting) concessions, with agricultural or forestry concessions overlaying mining concessions, which is further complicated by a failure to consider customary rights to land, forests, and other natural resources (Scullion et al. 2014; Ingram et al. 2011).⁹

Improving the clarity, comprehensiveness, and coherent nature of natural resource legal regimes can go a long way toward removing loopholes and other opportunities for rent-seeking. In many cases, the promulgation or revision of regulations implementing a natural resource law can provide the necessary clarity. Sometimes, though, statutory reform is necessary. Ultimately, though, having clear, comprehensive, and coherent laws is insufficient to prevent rent-seeking altogether: there will always be a need for implementation, enforcement, and above all political will.

Feasibility of the norms

Norms must be feasible in the specific social, cultural, economic, institutional, legal, security, and environmental context. Regulated persons and entities must have the ability to comply without unduly jeopardizing their security or livelihoods. The norms must also account for the economic, technical, and human capacity of both the regulated community and of the regulators. Where the rule of law is weak, it is particularly important that statutory norms align with customary practices and norms, or that alternative means for implementing and enforcing statutory norms are in place. Where statutory norms conflict with customary practices and norms, it is important to consider how to operationalize the statutory norms in face of the countervailing norms. Failing to consider these

⁹ New mapping initiatives are seeking to help countries and international partners better plan how to manage natural resources. These include one by UNEP and the World Bank mapping concessions related to extractive industries in a single platform (UNEP 2014b) and a civil society-led map of indigenous and community lands (www.landmarkmap.org).

issues when crafting norms will result in ineffective norms, and it can also undermine the perceived legitimacy of the governing authority.

In developing and reforming norms, decisionmakers must consider the specific needs and interests of the population; its ability to comply; and potential cultural, historic, or religious impediments. In Afghanistan, interim president Hamid Karzai issued a presidential decree banning illegal logging, in an effort to protect the country's disappearing forests (Nichols and Al Moumin 2016*). However, when it issued the decree, the government failed to recognize that the population had strong economic, cultural, and security incentives to not comply. Complying with the ban would have required many people to forego their primary source of income. In areas where the local mafia controlled the timber trade, complying with the ban would have placed people at personal risk of reprisal. Indeed, many Afghans viewed the decree as an effort by a corrupt government to capture timber for its own benefit.

Norms must also account for the capacity of different actors to perform their assigned functions. The regulated community must be able to comply, the government to implement and enforce, and civil society to monitor. In Liberia, the 2006 National Forestry Reform Law required social agreements between concessionaires and communities, to ensure benefit sharing while also encouraging investment (Altman, Nichols, and Woods 2012). In practice, these laws led to flawed agreements with inconsistent implementation and little enforcement (Waugh and Murombedzi 2016*). Communities reported that companies often refused to negotiate or negotiated in bad faith and failed to make themselves available to answer questions or discuss problems. Moreover, they claimed that elected officials pressured communities to agree to unfavorable terms. In this case, the communities lacked the capacity to effectively negotiate with large timber firms, undermining the objectives of the benefit-sharing provisions.

Whether a particular norm is feasible in a particular social, cultural, economic, institutional, legal, security, and environmental situation will change over time. Much can be done to build capacity and raise awareness to make particular approaches more feasible. For example, when a decentralized approach to sharing diamond revenues in Sierra Leone encountered problems with corruption, the government and development partners undertook a series of capacity building, awareness raising, and naming-and-shaming measures that substantially reduced corruption in the distribution and use of diamond revenues (Kawamoto 2012).

Recognition of legal pluralism

National governments are never the sole source of norms in a society. Additional norms may come from local or state governments, community leaders, religious tenets, customary practices, and societal convention. This multiplicity of normative systems is termed *legal pluralism* and constitutes an important context for natural resource governance.

Legal pluralism and hybrid political orders that combine customary, statutory, and (sometimes) religious norms and institutions are particularly relevant in post-conflict countries (Meinzen-Dick and Pradhan 2016*; Boege, Brown, and Clements 2009; Unruh and Williams 2013; Sait 2013). During conflict, the ability of the national government to apply statutory law can weaken, as the legitimacy of governing regimes is called into question or the capacity of formal institutions to enforce statutory norms declines. Civil unrest and associated security problems may isolate particular communities and regions, reducing access to and by centralized legal authorities. In these circumstances, local systems or alternative sources of law or authority, such as customary or religious law, may expand to take on additional roles in managing resource allocation and settling disputes. Following conflict, international peacekeeping, humanitarian, and development organizations bring in their own norms, further complicating the field. These different normative systems can overlap and in some cases conflict, creating uncertainty regarding which norms apply and under which circumstances (Meinzen-Dick and Pradhan 2016*). For example, in Sudan, there are different statutory and customary regimes governing common property, private property, and state property; these regimes overlap and sometimes conflict (UNEP 2013b).

Customary law can change during conflict, as people flee their homes and communities seeking safety, as traditional leaders die, and as men and women take on different roles. In Aceh, Indonesia, land ownership was traditionally determined by customary law or *hokum adat* (Lakhani 2016*; Green 2013). Adat leaders typically did not keep written records of land ownership, transfers, or dispute settlements, and what few written records did exist were destroyed during the 2004 Boxing Day tsunami. The resulting uncertainty over land tenure—complicated by land disputes arising from twenty-five years of intermittent fighting and internal displacement—has been a major obstacle to agricultural development, foreign investment and other land-dependent projects in Aceh.

Legal reform and rule of law efforts often mistakenly ignore or simplify existing pluralistic situations, focusing instead on developing national laws and centralized strategies and programs. Often this approach will be ineffective, as the majority of the population continues to operate under customary legal systems. At worst, attempts to impose top-down statutory law without consideration for other normative structures can create conflict, increase uncertainty, and undermine the legitimacy of the central government and its programs. One of the most common ways to address widespread land conflicts is to start with a land conflict typology that helps to understand the types of the conflicts, the causes of the different types of conflict, and then to resolve a large number of the conflicts using a specific decree or legislative process (Unruh and Williams 2013).

Many countries explicitly allow for legal pluralism, either by incorporating religious or customary principles into constitutional or statutory law, nesting customary law within a statutory framework, or by recognizing the validity of alternative sources of norms (Nichols and Al-Moumin 2016*; Meinzen-Dick and Pradhan 2016*). Over half of countries involved in major armed conflict since

1990 recognize customary, cultural or religious principles or systems in their constitutions,¹⁰ and almost one-fifth of the constitutions mention pluralism in the context of natural resources (usually land or water).¹¹

Recognizing and integrating multiple legal systems governing natural resources can contribute to more flexible, workable, and acceptable systems. This process can be particularly valuable for managing natural resources on a local level that are subject to a high degree of natural variability in location and quantity, such as water, and customary systems enjoy more familiarity and popular legitimacy.

Legal pluralism can, however, increase uncertainty. Different normative systems can provide support for conflicting claims, making it hard to predict which argument (or norm) will win. Moreover, using customary or local norms to inform statutory law or administrative regulations can result in distortion and simplification of complex, dynamic, and situation-specific systems to fit into rigid statutory frameworks. For example, when customary practices governing non-exclusive access to, possession of, and use of land—which can depend on season, social relationships, and other changing factors—are shoehorned into exclusive ownership systems, many users will lose access to vital resources (Meinzen-Dick and Pradhan 2016*). In these cases, marginalized groups, such as ethnic minorities and women, are often affected disproportionately.

Another challenge with customary law is that it is not always fair, inclusive, or appropriate. Traditional and religious norms, particularly those affecting women and minorities, may not align with internationally recognized human rights. For example, in Côte d'Ivoire, Mozambique, Tanzania, and other countries, customary law prohibits women from owning land, in contravention of national legislation and international human rights law (Meinzen-Dick and Pradhan 2016*). Ideas of sustainability, conservation, and environmentalism may also be difficult to transpose where a customary or religious norm allows actions that are unsustainable or otherwise anathema to the new norms (Ahmad and Bruch 2002). Moreover, following conflict, customary systems may be weakened or incapable of dealing with new problems such as demographic changes leading to ethnic tension, or resource scarcity related to wartime damage. And where grievances related to customary institutions contributed to the onset of conflict—as in Sierra Leone, where lineages limited the ability of young men to acquire land (Richards 2005; Mokuwa et al. 2011)—it may be inappropriate to empower customary norms and institutions.

¹⁰ Of fifty-six countries that experienced conflict resulting in more than 1,000 total battle deaths between 1990 and 2015, twenty-eight (50 percent) have constitutions that respect cultural, indigenous, customary, tribal, or religious normative systems, principles, or practices (Bruch et al. n.d.).

¹¹ The ten countries with constitutional provisions recognizing legal pluralism in the context of natural resource governance are Angola, Colombia, Guatemala, India, Nicaragua, Peru, Philippines, South Sudan, Sudan, and Uganda.

968 Governance, natural resources, and post-conflict peacebuilding

The legal context for natural resource governance is often multifaceted and complicated to the point of being messy. Recognizing and embracing the existence of multiple overlapping legal orders can help to manage the complexity, but excessively relying on them or incorporating them in their entirety can be as bad as ignoring them altogether. Legal pluralism provides a framework for embracing customary and religious norms while simultaneously protecting against potential abuses.

How to integrate the various statutory, customary, and legal systems governing a particular resource depends on the particular context. Ruth Meinzen-Dick and Rajendra Pradhan conclude their analysis of legal pluralism, natural resources, and post-conflict peacebuilding with the observation that “the prevalence of legal pluralism calls for greater humility in policies and programs. There is no such thing as getting the ‘right’ law or the ‘right’ institution to allocate or manage natural resources: rights to resources are often established through messy, dynamic processes” (Meinzen-Dick and Pradhan 2016*, 541). Thus, the process by which a particular country structures legal pluralism in its particular context is critical, and a broad consultative process is likely to yield the most appropriate and robust arrangement.

Compatibility with local values and internationally recognized human rights

Laws that are not recognized as legitimate by the population of a country are worthless. Rule of law is much more effective when the laws reflect a social contract, arise from a legitimate process, and reflect local values—rather than solely from a fear of enforcement. Moreover, it will strain the capacity of any government to effectively enforce laws that are not seen as legitimate.

Recognition or protection of traditional or religious principles can enhance legitimacy of the legal system. The post-conflict constitution of Afghanistan specifies that the operation of the national government will not interfere with the tenets of Islamic law, and recognizes shariah as the governing law in certain cases.¹² Such guarantees of traditional and religious systems offer a familiar normative framework for post-conflict populations.

However, local values may not always align with internationally recognized human rights. It is often asserted that Islamic religious authorities—for example, in Afghanistan—have used religious law to restrict the rights of women, including rights of inheritance and property ownership, limiting access to resources such as land (USAID 2013). Usually, though, Islamic law offers substantially more protections for the rights of women to acquire and own land than they enjoy under customary law; indeed, the curtailment of women’s rights more often arises from customary authorities and norms, rather than Islamic authorities and

¹² Constitution of Afghanistan (2004), arts. 3, 131, www.unhcr.org/refworld/docid/404d8a594.html.

norms (Sait 2013). Despite this, several international organizations continue to support formal recognition of customary and religious law in Afghanistan, believing that these legal systems are essential to improving access to justice in the short term, which they prioritize over long-term human rights goals (Grenfell 2013).

Ensuring local legitimacy does not mean always accepting existing customary and religious norms and institutions. Legal reform, even when it borrows concepts and laws from external sources, can promote legitimacy by rectifying flaws and inequities in previous systems. Establishing and protecting human rights can reinforce and improve government legitimacy, particularly where human rights violations occurred in recent conflicts. In the context of natural resources, preserving the status quo can mean institutionalizing elite control over valuable land, minerals, and other resources. This can be true even at the local level, where community elites may monopolize resources to the detriment of other community members, particularly where conflict, political upheaval, or the appearance of new factors such as migrants or investors have disrupted previously functional systems (Roe, Nelson, and Sandbrook 2009).

The process of gradually undoing elite control of land and other natural resources is challenging and often takes a long time. In some instances, there are dramatic land reform processes, breaking up large estates. However, these rarely go smoothly and can raise questions about process and human rights—as in Zimbabwe (Hellum and Derman 2004). More often, land reform tends to be a gradual process (Unruh and Williams 2013). Where elites have captured forestry resources, often through corrupt practices, independent concession reviews have been undertaken (for example, in Liberia and DRC), leading to cancellation or renegotiation of concessions (AFDB 2015). It is usually useful and sometimes necessary to convince local elites that it is in their long-term interests to adopt reforms (Garrett 2016*).

Ensuring both local legitimacy and protection of human rights is often difficult, and it is always important. Maintaining local systems is not always the best way to ensure local legitimacy, and creating new laws or limiting local authority does not always serve the interests of human rights. New norms must be based on a sound understanding of the specific context.

EFFECTIVE INSTITUTIONS

Laws alone are not sufficient for ensuring good governance. Institutions and management structures need to be capable of developing, adapting, and implementing those laws through planning and programming, permitting and administration, data collection and management, inspection, monitoring, enforcement and dispute resolution. This requires technical expertise, adequate funding, political will, and buy-in at all levels.

The effectiveness of institutions governing different natural resources is linked to the effectiveness and legitimacy of institutions throughout government,

970 Governance, natural resources, and post-conflict peacebuilding

for example those responsible for taxation, transportation, and export. When they are well governed, natural resources can provide an important source of revenue for funding government services across sectors. Conversely, if public funding is disrupted for long periods, as is common during and following conflict, unpaid officials across sectors may turn to alternative sources of income, often direct rent seeking associated with the exploitation of minerals, timber, and other natural resources.

Corruption in the natural resource sector is particularly challenging in post-conflict settings for three reasons (Cheng and Zaum 2016*). First, post-conflict countries are often characterized by power struggles between groups seeking control over natural resources and their rents. South Sudan's civil war is but one example (Zeitvogel 2015). Second, government institutions are often fragile, lack the capacity to monitor or fight corruption effectively (and, for that matter, to manage natural resources effectively), and are unwilling to take actions that might destabilize a fragile peace. Finally, the post-conflict period is dynamic, with laws, institutions, and practices undergoing often dramatic reforms, and parties testing the viability of the new modalities—as well as the new opportunities and barriers to corruption.

The capacity and authority necessary for achieving good governance of natural resources is unlikely to rest within a single agency, level of government, or even the government as a whole. As the chapters in this book repeatedly demonstrate, natural resource management often requires a wide variety of actors and institutions—national, subnational, and international; state and nonstate, including civil society and the private sector; statutory and customary—to build the capacity, legitimacy, and public awareness necessary for effective governance.

The international community can play an important and particularly constructive role in strengthening institutions, and where appropriate helping countries to reform institutions. Through the post-conflict needs assessment and post-conflict environmental assessment, the international community can provide an objective assessment of the strengths and weaknesses of the institutions responsible for governing natural resources (Jensen and Lonergan 2012). These assessments inform both international and domestic programming, setting priorities, mobilizing funding, and focusing political attention (Jensen 2012). The international community is invaluable in building capacity, providing technical assistance, and may second or otherwise embed staff (Bowling and Zaidi 2015; Oglethorpe et al. 2016*; Lehtonen 2016*), and international peacekeepers play an invaluable role in reinforcing security and reforming the domestic security sector (Waleij et al. 2016*). When political will falters, the international community can provide economic incentives for benchmarked improvements in governance; and in extreme circumstances, may impose (or reimpose) sanctions on trade in natural resources that is contributing to instability (Taylor and Davis 2016*). In Liberia, for example, the international community has supported the efforts of President Ellen Johnson Sirleaf and other reformers through a combination of sanctions, monitoring, supporting a concession review process, technical assistance, capacity

building, and peacekeeping—with peacekeeping forces helping to regain state control over areas with timber, rubber, and minerals.¹³

The case studies in this book highlight six key factors that determine the effectiveness and fairness of institutions. These are: (1) appropriate allocation of authority and responsibility, (2) sufficient capacity at all levels, (3) coordination among institutions and agencies, (4) support from regional and international organizations, (5) equity and inclusion, and (6) rule of law. These are discussed in turn.

Allocation of authority and responsibility

Governance is rarely a unitary endeavor, particularly in the context of natural resources. At the national level, natural resource governance may involve separate ministries or agencies with jurisdiction over finance, internal security, agriculture, land, the environment, and specific resources such as water or petroleum. For example, water management often involves the Ministries of Water, Environment, Agriculture (for irrigation), Public Works (for water and sanitation infrastructure), Energy (for hydropower), and Finance. In many countries, and especially federal countries, provincial or other subnational governments have regulatory authority over land, water, and sometimes forestry resources: this is the case in Ethiopia, Iraq, and Bosnia Herzegovina, among other countries (Bruch et al. n.d.). Countries recovering from secessionist conflicts—including Serbia and the Philippines¹⁴—often provide for autonomous regions that have substantial authority over local management of natural resources, although this usually excludes management of valuable minerals, oil, and gas. Almost twice as many countries (twenty-three) have constitutional provisions guaranteeing legal pluralism, recognizing the authority of customary and religious institutions, often including the authority to regulate access to, use of, and ownership of land, water, fuelwood, and other natural resources central to livelihoods (Bruch et al. n.d.; Maldonado and Martinez 2016*).

This sort of hybrid political order governing natural resources is particularly common in post-conflict states (Carbonnier and Wennmann 2013). In the wake of a conflict, weakened national governments often do not have the ability to extend power across the whole territory. During the conflict, staff may flee the country seeking refuge and vehicles are commandeered for the war effort—affecting post-conflict capacity. Moreover, militarization of resource-rich areas, lingering insecurity, and conflict can make it difficult for government staff to access remote areas to monitor natural resource-related activities, let alone enforce. In the Iraqi Marshlands, lingering insecurity made it difficult for water

¹³ See, for example, Altman, Nichols, and Woods (2012), Nichols and Goldman (2011), Taylor and Davis (2016)*, Rochow (2016)*, and Waugh and Murombedzi (2016)*.

¹⁴ Of fifty-six countries experiencing major armed conflict between 1990 and 2015, constitutions of thirteen provide for autonomous regions (Bruch et al. n.d.).

972 Governance, natural resources, and post-conflict peacebuilding

officials to collect fees or install water services (Aoki, Al-Lami, and Kugaprasatham 2014). In Timor-Leste, customary institutions have continued to govern land management, even as the government has tried (and thus far failed) to adopt a land law over more than a decade after independence (Miyazawa 2013). During the armed insurgency in Nepal, rebel Maoists controlled many of the country's forests, including Chitwan National Park. After the conflict ended, illegal hunting continued largely unchecked within the park's borders. The Nepalese government, which was preoccupied with keeping the peace and holding elections, lacked the capacity to deal with the poaching, forcing local communities to take protection of the park's wildlife into their own hands (Oglethorpe et al. 2016*).

In such situations, alternative systems of natural resource governance can strengthen governance even as statutory institutions are incapacitated, undergoing reform, or distracted with other peacebuilding priorities. Local authorities—whether statutory, customary, or hybrid—typically focus on governing those resources essential to local livelihoods, food security, and welfare. Thus, communities may ensure that irrigation canals continue to operate, land inheritance proceeds, and that water and land resources are shared between agricultural and pastoral communities (Ostrom 2010; Burt and Keiru 2014; Zahler et al. 2016*).

There is often a tendency to interpret the lack of central authority as fragility or state failure, even if there are strong customary institutions (Boege et al. 2008). For example, following the independence of Timor-Leste, some in the international community reportedly considered the nascent national government as representing a blank slate for developing new governance systems. In doing so, they ignored existing customary institutions, incurring resentment among large portions of the population and unnecessarily contributed to ongoing instability in the country (Boege et al. 2008).

Decentralization of authority to govern natural resources to local statutory and customary institutions can have many benefits in post-conflict countries (Brinkerhoff 2007). Decentralization can contribute to local empowerment and provide a platform for sustainable democratization, economic development, reconciliation, and social integration. Local governance bodies typically better understand local issues and local disputes than their national counterparts, and they are usually better positioned to incorporate local input into the decision-making process and address natural variation in resource availability (World Bank 2001). This closer connection to affected populations can improve the effectiveness of governance and can build a relationship of collaboration between government and the governed. In this way, it is possible for decentralization of authority over natural resources to be a vehicle for promoting a culture of political, economic, civic, and managerial/administrative good governance (Kauzya 2005). Moreover, improving local and customary governance processes can improve resilience to conflict relapse and other shocks, even in the face of fragile national governance (Menkhaus 2013; Waugh and Murombedzi 2016*; Ratner 2015).

In the context of natural resource management, decentralization happens most often for natural resources related to local livelihoods, food security, and

welfare. Such resources typically include land, water, community forests (for fuel, construction material, non-timber forest products, and small-scale timber operations), wildlife, and fisheries. National governments usually retain control over minerals, oil, and gas—which are high-value, an important source of government revenues, and often require substantial capital investment—and thus are not usually subject to decentralization, although there may be separate provisions for artisanal and small-scale mining.

Local governments that are closer to the communities that depend directly on natural resources may be less inclined to get bogged down in administrative turf wars that can frustrate management activities at a national level. For instance, in Afghanistan, progress in governing and maintaining essential irrigation infrastructure has been delayed by a national-level dispute between the Ministry of Energy and Water, the Ministry of Agriculture, and the Ministry of Rural Rehabilitation and Development regarding which ministry has the mandate to take action (Bowling and Zaidi 2015). In contrast, the administration of irrigation canals at the local level has faced no such difficulty (Roe 2015).

Determining the proper level of decentralization for administering natural resources creates considerable challenges.

In some cases, centralization of power is most appropriate. Centralized government is useful for (1) comprehensive projects that require large budgets, significant technical skill; (2) a uniform national approach, such as building irrigation or flood mechanisms (Sugiura, Toguchi, and Funciello 2014) or reforming land tenure (Batson 2013); (3) or managing the macroeconomic challenges and opportunities associated with developing high-value extractive industries; and (4) where natural resource revenues may have been used to finance armed conflict, or otherwise pose an ongoing risk to security. There can be efficiencies of scale in managing natural resources on a national level, avoiding duplication of physical infrastructure and bureaucratic effort. Following World War II, the reconstruction of Japanese irrigation and flood control mechanisms instituted an unprecedented level of national-level control that helped swiftly restore the productivity of Japanese agriculture (Sugiura, Toguchi, and Funciello 2014). For processes of titling and surveying land, there is value in a standard national approach to documentation and procedures, as was introduced in Afghanistan following the 2001 war (Batson 2013).

In other circumstances, discussed above, decentralization of authority is appropriate. This is especially true for renewable resources important for local livelihoods, food security, and welfare.

Usually, governance of natural resources has some combination of centralization and decentralization. Even where the national government retains control over minerals or commercial forestry, there are often efforts to share revenues and other benefits with local authorities and to provide local authorities with a voice in deciding how to use those revenues and benefits (Waugh and Murombedzi 2016*). In Liberia, forest resources are managed for commercial purposes (with the national government taking the lead), community benefit (with communities

taking the lead), and conservation (with the national government taking the lead, and involving communities). Minerals, oil, and gas are governed by the national government, with benefits being shared with producing communities. And the proposed Land Rights Bill would (as of late 2015) divide the country into community land.

Increasingly, post-conflict countries are adopting comanagement approaches that share responsibilities for governing natural resources between the central government and resource users (Green 2015; Berkes, George, and Preston 1991; Carlsson and Berkes 2005). These responsibilities range from natural resource planning to use to dispute resolution, and they may be shared with local authorities that are customary (legal pluralism) or otherwise (decentralization). For example, in Afghanistan, tribal councils are empowered to resolve rangeland disputes, but if a party does not believe the law has been properly implemented it may appeal to statutory courts (Bowling and Zaidi 2015). This approach to resolving local land disputes using nested authorities has helped dissipate dissatisfaction with the central government's land policy. The reform represents not atomization, but a bottom-up approach to governing resources essential to local livelihoods in a way that recognizes both government authority and the benefits of customary approaches and local expertise.

Another challenge that is particular to conflict-affected settings is how to build on and otherwise address institutions that have evolved during the conflict when the government was unable to function effectively in particular areas. This is particularly the case for local delivery of water services, and the informal sector steps in to provide access to water (Pinera and Reed 2014; Burt and Keiru 2014). The informal sector, though, is particularly susceptible to price inequities, uneven quality, and noncompliance with local drinking water standards (Troell and Weinthal 2014). As a practical matter, though, the informal sector is often the greatest provider of water, and simply banning the unlicensed commercial sale of water could do more harm than good. In Angola and elsewhere, governments emerging from conflict have sought to engage and progressively formalize informal water delivery (Cain 2014). In the process of engaging and formalizing the informal water sector, experience highlights the importance of involving residents from informal settlements in the negotiations and decision making between the state, local authorities, and the informal sector.

As with norms and legal pluralism, local and customary institutions are not always fair or representative, and may lack capacity or will to protect the rights of all people. Institutions with capacity to govern natural resources frequently resist change, and may be indisposed toward efforts to reform governance approaches to be more transparent, inclusive, or equitable. Local and traditional institutions are not immune to corruption, nepotism, rent-seeking, and other destructive behaviors (Kawamoto 2012). Moreover, both formal and informal community level institutions may have been dismantled or substantially modified during conflict.

Polycentric governance is not a choice; it is a characteristic of every governance system in the world. However, in reforming and rebuilding natural

resource-related governance following conflict, important and difficult decisions emerge regarding how best to allocate authority over natural resources among new and existing institutions and structures at multiple levels. Ultimately, determining the most appropriate allocation requires a thorough assessment of the existing situation and the potential for building capacity and legitimacy at different levels. Typically, high-value extractive resources are best governed at the national level, while renewable resources have more local control and responsibility.

Sufficient capacity at all levels

Capacity is one of the most important and discussed aspects of governance. Institutions at all levels need sufficient capacity to carry out their responsibilities. At a minimum, institutions need adequate legal and technical expertise, project and budget management ability, technological resources, and adequate and sustainable funding. Following conflict, these resources are usually in short supply, with intense competition for capacity building support that does exist.

Lack of institutional capacity in the natural resource sector can significantly impact governance across sectors, and the lack of institutional capacity unrelated to natural resources can affect effectiveness of natural resource governance. Many countries lack the capacity to administer tax systems, negotiate with international investors, and manage and reinvest resource revenues. In resource-dependent countries, this can severely impact availability of funding necessary to develop and maintain good governance systems (Okonjo-Iweala 2013).

Given the inherently polycentric nature of governance, capacity building at all levels is essential to a workable governance system. Decentralization of authority without regard for local level capacity can be disastrous. In Liberia, comprehensive forestry reforms following the civil war provided for community forestry development committees (CFDCs) to manage forest resources and distribute benefits within communities. However, the cost of formally creating a CFDC ranged from US\$1,800 to 4,500, in a country where the annual average per capita income was only US\$170 (Waugh and Murombedzi 2016*). Because of the lack of financial capacity, half of the planned CFDCs were never incorporated, leaving local communities without appropriate mechanisms to ensure fair distribution of benefits from their forests.

There is often an effort to “train the trainers,” so that endogenous capacity is built to build capacity in the future. Such train-the-trainers approaches need to consider how future training will take place, and particularly the financial sustainability of such funding (Hill and Pendergrass 2011). For example, institutionalizing training programs in existing training modalities—such as training for onboarding at police academies and judicial institutes—can provide an ongoing means to build capacity that is not dependent on external funding (Pendergrass 2010).

Local level governance structures, both statutory and customary, often lack technical and legal capacity. At local levels, officials and judges responsible for enforcement may even lack access to laws and regulations (Pendergrass 2010).

976 Governance, natural resources, and post-conflict peacebuilding

Judicial capacity poses particular challenges. Building judicial capacity is essential to strengthening rule of law following conflict (UNSC 2004). However, after conflict, courts are often overburdened and unable to effectively respond to all disputes. Judges may lack sufficient legal training, and even access to basic legal texts. In a 2006 study of district courts in Mozambique, the Open Society Foundation found that five of the ten courts surveyed had no access to copies of the current Constitution, and only two courts owned copies of the Civil Code, Civil Procedure Code or Criminal Code (Open Society Foundation 2006).

Since many local disputes relate to land, water, and other natural resources,¹⁵ building judicial capacity to fairly and expeditiously resolve natural resource-related disputes is essential to enhancing the peaceful resolution of disputes. Where local universities or NGOs have expertise in environmental and natural resource law, these institutions can partner with the judiciary to develop and deliver cost-effective capacity building programs. Capacity building is not a one-off effort. There are often revisions to many natural resource laws and regulations following conflict, and experience shows that building judicial capacity helps judges to feel more comfortable deciding environmental and natural resource cases (Pendergrass 2010). Accordingly, both statutory and case law (in jurisdictions that recognize precedent) are likely to evolve over the life of a capacity building program. In such circumstances, judicial seminars and other continuing education opportunities can provide updates for judges.

Coordination among institutions and agencies

For governance to be effective, there must be coherence and integration among institutions and agencies at multiple levels. In the best of times, coordination in environmental governance can be challenging due to the number of ministries, agencies, and other institutions that are involved. Coordination in the dynamic post-conflict period is even more challenging as agencies seek to rebuild, reestablish their authority, and adopt or revise a broad range of legislation and regulations.

Countries with ethnic conflict can be particularly fragmented. For example, following the violent dissolution of Yugoslavia, the Republic of Bosnia and Herzegovina was structured as a federation of self-governing federal entities, which included fourteen legal municipalities with thirteen different constitutions, thirteen prime ministers, five levels of administration, five presidents, and approximately 150 ministries (UNDP n.d.). To further complicate matters, both federal and local government bodies are responsible for different aspects of environmental protection and natural resource management.

Both horizontal (across sectoral institutions at the same level) and vertical (across different levels) coordination is essential to the effective governance of

¹⁵ See, for example, Waldman (2008).

natural resources. For example, farmers may be affected by decisions by the ministry of lands (governing land rights and procedures), ministry of water (governing irrigation water), ministry of commerce (governing agricultural concessions, which may affect farmers operating under customary land tenure regimes), ministry of industry/agriculture (governing inputs, market access, and incentives), and ministry of justice (to help protect their rights and resolve disputes), among others. At the same time, farmers most often interact with local institutions, which may or may not be effectively linked to national ministries. As part of power sharing in the peace process, responsibilities for different government ministries are allocated to different groups who had until recently been seeking to crush one another (Sriram and Zahar 2009). Thus, in post-conflict countries, farmers have been caught between a ministry of land headed by an official from one former belligerent group and the ministry of water headed by an official from another former belligerent group.

The post-conflict state often lacks cohesive governmental entities experienced in natural resource restoration and governance. These entities must be able to work in concert with other governmental sectors, local communities, and international organizations operating within their borders. Some post-conflict countries have little history with national governance of natural resources and the environment. For example, in Afghanistan, a mainly agrarian tribal nation with a history of much strife over natural resources, following the Taliban era, the Loya Jirga in 2002 was the first time that natural resources and environmental protection issues were even considered in national planning (Young and Goldman 2015). To the extent that countries decide to develop national institutions governing natural resources and the environment, the post-conflict period represents a unique opportunity to build in horizontal and vertical coordination at the outset.

Increasing coordination in natural resource governance has been a priority in Afghanistan. Afghanistan's National Environmental Protection Agency (NEPA) was established as the overarching authority on environmental governance in Afghanistan, under which a legal framework to create environmental protections could be established. NEPA coordinates between ministries responsible for governing natural resources and the environment, including the Ministry of Agriculture, Irrigation, and Livestock and the Ministry of Energy and Water. Notwithstanding its significant mineral reserves, Afghanistan remains a primarily agrarian and tribal nation with much of the population dependent on agriculture (UNCTA 2013). The 2007 Environmental Law recognizes community-based natural resource management and enumerates powers given to local community leaders (UNEP and NEPA 2007). While Afghanistan has seen progress in coordination of environmental governance, there is still an abiding need to improve coordination, both internally and with donors (Niazi 2015).

In the early 2000s, Afghan leaders and the international community sought to slow the pace of environmental degradation, which was due in part to decades of armed conflict. The newly installed interim government of President Hamid

978 Governance, natural resources, and post-conflict peacebuilding

Karzai implemented both bottom-up, community-based natural resource management initiatives and top-down government edicts and laws (Bowling and Zaidi 2015). Small, successful, community-based environmental restoration projects in the central highlands and in western and northeastern Afghanistan continued even as fighting with the Taliban intensified.

Coordination of natural resource governance authorities is often caught between efforts of centralization and decentralization (Lockwood et al. 2010), and vertical coordination between national-level initiatives and community-based natural resource planning needs to start as soon as possible following the peace process. In post-conflict settings, there are many local, community-based environmental reconstruction efforts. Often, these efforts do not coordinate with other local programs or with overarching national authorities, increasing the likelihood of duplication and gaps (Jensen and Lonergan 2012).

Support from regional and international organizations

As part of post-conflict peacebuilding processes, regional and international institutions can provide support for national and subnational institutions, providing technical assistance, supplemental funding, and independent expertise (Paris 2004). This support can build capacity and promote cooperation and trust in conflict-affected societies.

The United Nations Environment Programme (UNEP) has supported many conflict-affected countries in managing the environment and natural resources. It has worked with conflict-affected states to assess the impacts of conflict on the environment and natural resources, evaluate current capacity, and prioritize needs (Jensen 2012; Conca and Wallace 2012). It has helped Afghanistan, Sierra Leone, and other countries to develop and strengthen laws and institutions governing the environment and natural resources (Bowling and Zaidi 2015; Brown et al. 2012). It has mobilized human, technical, and financial resources to remediate polluted hotspots in the Balkans, Iraq, and Sierra Leone (Thummarukudy, Brown, and Moosa 2012). It has fostered cooperation around mountain gorillas in the Albertine Rift, a region that has suffered a number of brutal civil wars (Refisch and Jenson 2016*).

UNEP's experiences yield a few key lessons. First, domestic ownership is essential. Where assessments, proposed laws, or other initiatives have domestic ownership, they are more likely to be implemented. Where local practices are inconsistent with good practice, it can be particularly challenging to introduce new approaches. Second, over the long run, building governance capacity is at least as important as tangible deliverables—but it can be particularly difficult to show impact of capacity building and other governance projects through customary monitoring and evaluation processes. Third, while UNEP focuses on natural resources and the environment, much of its work in conflict-affected countries is justified by how the initiatives support peacebuilding processes (rather than on environmental considerations). For example, economic valuation by the Poverty

and Environment Initiative of the United Nations Development Program and UNEP highlighted the importance of natural resources to Rwanda's local and national economies, and thereby supported prioritization of natural resources (Wrist Sorensen 2016*).

Regional institutions can use natural resource policies and initiatives to help countries emerging from conflict reintegrate into regional political processes. Established as a number of Central American states were emerging from years of bitter, linked civil wars, the Central American Commission on Environment and Development (Comisión Centroamericana de Ambiente y Desarrollo, or CCAD) supports development and administration of natural resource governance systems throughout Central America (King et al. 2016*). CCAD works with its member states to develop model environmental legislation, and it then supports member states as they adopt and implement the legislation. CCAD also promotes regional coordination through joint negotiating positions in international environmental fora, through development of a regional environmental agenda, and through joint environmental projects (such as those establishing regional biodiversity corridors). Significantly, it also helps to secure funding for environmental projects in the region.

Increasingly, humanitarian, development, security, and other organizations that do not normally focus on natural resources and the environment have become more active in supporting initiatives related to natural resources and the environment in post-conflict countries. Militaries use natural resources and the environment as a politically safe area for military-to-military cooperation (Dabelko and Rogers 2016*). Peacekeeping missions increasingly have a mandate to address natural resources, especially when they contributed to the financing of the conflict (Taylor and Davis 2016*), and they increasingly seek to reduce their environmental impacts to reduce potential tensions with local communities (Ravier et al. 2016*; Waleij et al. 2016*). In this capacity, they have provided technical assistance to post-conflict countries in seeking to improve natural resource governance. Humanitarian organizations that assist population displaced by armed conflict have mainstreamed consideration of the environment into their assistance, and have started to address upstream environmental considerations (Jarvie 2016*). And development organizations have found that the failure to consider the conflict-environment nexus can compromise the development objectives (Ruckstuhl 2016*).

Regional nongovernmental institutions can also provide targeted financial support to address particular urgent problems, such as conflict over natural resources. In South America, the Early Action Fund (EAF) supported peaceful dispute resolution by funding interventions in environmental disputes likely to escalate into violent conflict (Dumas 2016*). In a pilot project between 2005 and 2007, the EAF funded interventions to improve communication, generate information, and empower the less empowered side of the dispute to give aggrieved parties a peaceful means by which to discuss and ultimately resolve the disputes.

Equity and inclusion

Laws and institutions governing natural resources are often designed to suit the most numerous or visible populations. They may draw on ideas of rights and fairness that suit certain groups over others, or they may establish mechanisms for dispute resolution, resource administration, or benefit allocation that favor certain groups or individuals. Strengthening natural resource governance without paying attention to the underlying norms and mechanisms can reinforce de facto discrimination against marginalized groups.

Women, indigenous peoples, and other marginalized groups have historically been left out of the peacebuilding process. A UN study of twenty-four peace processes found that women made up on average less than 8 percent of the delegates to peace negotiations and 2.5 percent of signatories of peace agreements (UNIFEM 2010). Indigenous peoples are similarly underrepresented, unless they represent one of the parties to the conflict.

People can be marginalized on many different bases, from ethnicity to social class to occupation. However, certain groups are marginalized consistently in various situations throughout the world: indigenous groups, women, and youth (MRG 2012; UNEP et al. 2013; Karuru and Yeung 2016*; McEvoy-Levy 2011). These groups are both vulnerable and important to the nexus of natural resources and good governance. Lessons from the experiences of these groups can inform strategies for addressing issues related to other marginalized groups in different contexts.

Increasingly, the international community is recognizing the importance of marginalized groups to peacebuilding. For example, the UN Security Council has adopted landmark resolutions on women and peacebuilding (resolution 1325) and on youth and peacebuilding (resolution 2250) (UNSC 2000, 2015). These resolutions emphasize participation and representation, protection, prevention (including economic opportunities), and return and reintegration.

Inclusion of marginalized groups in the development and implementation of natural resource governance systems can help to address these problems of equity. It is also an important mechanism for improving governmental legitimacy in the eyes of all stakeholders. Failure to engage marginalized groups and to protect their resource rights can also retard economic recovery, undermine local livelihoods, and feed grievances that can destabilize a fragile post-conflict situation (UNEP 2009). While participation alone will not ensure equitable and effective natural resource management, it is essential to ensuring that all people—and especially marginalized people—have the opportunity to know about potential decisions and actions that might affect natural resources upon which they depend or otherwise have an interest in, and have the opportunity to speak and have their perspectives considered by decision makers (Larson and Ribot 2004; UNECE 2014). Where such mechanisms do not exist or they have not been used effectively, it may be necessary to conduct special assessments and planning processes to ensure consideration of and participation by marginalized people in natural

resource governance decisions. These assessments may include, for example, stakeholder identification and analysis and environmental and social impact assessment (Conroy and Peterson 2013; AFDB 2003).

Recognizing that communities are not homogeneous, Conservation International adapted and pilot tested their approach to conservation agreements in Liberia and Timor-Leste to ensure that marginalized people are considered and included in conservation decisions, including those relating to benefits communities receive (Arjoud, Westerman, and Edmond 2015). Ensuring consideration of these interests requires careful up-front analysis in understanding the threats to conservation (including the sources), how decisions are made and implemented, and ownership and use of natural resources in the area.

Indigenous groups

Indigenous peoples can be particularly vulnerable to negative impacts of resource development following conflict. Indigenous territories often contain as-yet reserves of minerals, timber, and oil and gas that have not yet been extracted, and they tend to hold their lands under customary tenure regimes without title deeds (IASG 2014; Feiring 2013). At the same time, indigenous peoples can be particularly dependent on natural resources for maintaining their culture, livelihoods, and food security. This frequently leads to tensions between indigenous needs, national economic development goals, global conservation objectives and the interests of domestic and foreign investors (Walker Painemilla et al. 2010).

In Colombia, indigenous territories are home to valuable oil and mineral deposits. Under pressure from foreign investors, the national government designated areas for petroleum exploration within indigenous *resguardos* (Maldonado and Martinez 2016*). Ongoing conflict has also encroached on indigenous lands, further threatening communities and leading to forced displacement from their legally recognized territory. These groups lack the capacity or political leverage to effectively lobby for inclusion of their interests in national development plans. Some indigenous groups, like the Nasa in the Andes and several groups inhabiting the Sierra Nevada de Santa Marta region, formed networks between themselves and with civil society and international organizations to open channels of dialogue with the national government. Others remain trapped in an ongoing humanitarian crisis, while the national government prioritizes agriculture and foreign investment in extractive industries as means to achieve mainstream development goals.

The international community has increasingly recognized the importance of involving and consulting indigenous peoples, particularly in relation to use of natural resources on or near their territories. Free, prior and informed consent (FPIC) is the most prominent element with regard to the engagement and consultation with indigenous peoples, requiring that an indigenous community must be informed of the scope and nature of a proposed natural resource development project before the community decides whether to give or withhold its consent for the project (OHCHR 2013a). No coercion, intimidation, or manipulation

982 Governance, natural resources, and post-conflict peacebuilding

should be involved when such consent is sought, and the provision of relevant information should be made sufficiently in advance of the decision concerning the project.

In this context, several international instruments require FPIC when indigenous peoples could be affected by development projects, in the form of relocation or impact to the traditional lands and resources. These include the UN Declaration on the Rights of Indigenous Peoples, International Labor Organization (ILO) Convention No. 169 on Tribal and Indigenous Peoples, and the International Council on Mining and Minerals (ICMM) Principles of Sustainable Development.¹⁶ For example, ILO Convention No. 169 requires governments to consult indigenous peoples when their legislative and administrative measures may affect those peoples directly, by providing means of free participation in decision making, with a view to acquiring consent to the proposed measures (article 6), and “where the relocation of these peoples is considered necessary as an exceptional measure, such relocation shall take place only with their free and informed consent” (article 16).

Women

In developing and implementing laws and regulations governing natural resources, little attention is focused on the needs or interests of women. The international community is beginning to recognize the importance of engaging women in peacebuilding processes. A series of UN Security Council Resolutions emphasize that gender issues must be considered in post-conflict peacebuilding,¹⁷ and the UN’s multi-agency report on “Women and Natural Resources: Unlocking the Peacebuilding Potential” highlighted diverse ways in which women have been involved in natural resource governance, across resources, geographies, and peacebuilding objectives (UNEP et al. 2013).

This failure may be attributed to various reasons: the interests of women may be assumed to be the same as men’s, women’s needs may not be deemed to be important in relation to men’s needs, protecting women’s interests may threaten the distribution of power held by men, and there are often deep-seated cultural norms that discourage women’s participation in governance processes (Karuru and Yeung 2016*). This failure can undermine women’s ability to inherit land and protect their rights to water (NRC 2014). The Office for the UN High Commissioner on Human Rights has observed that “[m]any constitutions recognize equality between men and women in law. But in practice, it is a very different story, as men and women rarely experience such equality. This is particularly evident in housing” (OHCHR 2012, 36). While women often carry the primary

¹⁶ For the texts of these instruments, see www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf, www.ilo.org/indigenous/Conventions/no169/lang--en/index.htm, and www.icmm.com/our-work/sustainable-development-framework/10-principles.

¹⁷ UNSC (2000, 2008a, 2009a, 2009b, 2010, 2013a, 2013b).

responsibility for food production in a family, they usually do not have legal title to the land they work, and only about 20 percent of landowners tend to be women. In societies affected by conflict—where men may be away from home for extended periods of time, and often casualties of war—the impacts on women can be all the greater (UNEP et al. 2013).

Whereas most paying jobs go to men, including those jobs generated through development of the natural resources sector, women are often dependent on subsistence practices or small businesses such as small scale agriculture, shellfish collection, or production and sale of cooked food or small crafts (Karuru and Yeung 2016*). Moreover, women are often responsible for collection of fuelwood and water and providing food and home health care to their families. These responsibilities put women in a different position with regard to natural resources. For example, natural resource development policies that create jobs but degrade water quality may disproportionately burden women while benefitting men. In the Swima Valley, in the DRC, women are the primary water collectors for their families—as is the case in many countries. Their involvement in water collection led women to take a leadership role in water management in the community and monitoring of the quality of their water supply (Burt and Keiru 2014).

Women may also have a different legal relationship with natural resources. Customary legal and normative systems often provide differing rights to men and women for accessing, using, owning, and inheriting natural resources. In Uganda, for example, the post-conflict constitution and statutes explicitly ensure equality of men and women, but customary norms and institutions in northern Uganda have systematically denied women the ability to inherit or own land (UNEP et al. 2013). During conflict, women may take over traditionally male roles, as men leave to take part in combat or migrate in search of scarce jobs. In Aceh, Indonesia, for example, women increasingly worked in aquaculture and fisheries which had been male-dominated before the conflict (UNEP et al. 2013). Following conflict, the restoration of gender discriminatory normative systems for access to natural resources can leave female heads of household in a difficult position—and up to 40 percent of households in post-conflict settings are headed by women.

Discrimination against women may be either incidental or intentional. Men often dominate both customary and state-appointed positions of authority, particularly at local levels. Local decision makers often rely on customary norms in interpreting and implementing laws and adjudicating disputes; such norms can disadvantage women. In post-conflict nations, there is often an increase in female-headed households due to combat-related deaths of men. Even though it is even more important under these circumstances that women's rights to land are protected, the land rights are often insecure, particularly in traditional or tribal areas. After more than thirty years of conflict, many households in Afghanistan—a primarily agrarian and tribal nation—are headed by women, and these women often have no rights to their land due to inefficient land titles and few or ineffective inheritance rights under customary Afghan laws (GICHD 2010). Even

when the women hold appropriate title, they are less likely to understand their rights. Moreover, female heads of household are more likely to be illiterate and have fewer livelihood options than men, making women vulnerable to predatory practices. As areas that has previously been off-limits due to antipersonnel land mines are demined and become more valuable (as they become agriculturally viable), female heads of households disproportionately have their land grabbed by men. Women may lack the resources to access processes allocating and protecting rights in natural resources for many reasons, including language barriers, illiteracy, geographic location, poverty, lack of access to or experience with relevant technology, or lack of time (Karuru and Yeung 2016*).

Increasing participation of women in the processes of developing and implementing systems for natural resource allocation and management could help address and mitigate gender imbalance and exclusion. Moreover, women often have a unique perspective on and relationship with natural resources, and increasing female participation can provide valuable input and improve effectiveness of resource management, and in doing so improve economic productivity (UNEP et al. 2013).

The same obstacles that block women's access to institutional mechanisms may prevent women from meaningfully participating in development of natural resource management systems. In addition, women may face cultural obstacles to participation, such as socially-driven inability to speak freely in the presence of men (Karuru and Yeung 2016*; UNEP et al. 2013). It is often necessary to take special steps to ensure meaningful participation of women, such as tapping into existing women's organizations, holding parallel consultations for men and women, providing child care during meetings (Arjoud, Westerman, Edmond 2015), and using technology to which women have access (such as cellular phones and radio, rather than internet, depending on the circumstances). Moreover, it is critical to analyze the impacts of new laws, policies, and projects on each gender—this may be done through strategic environmental assessment for laws and policies, and through a social impact assessment (or an environmental and social impact assessment) for projects.¹⁸

Increasing participation is not the only answer to the problem of gender inequality in natural resource management. Eliminating both *de jure* and *de facto* gender discrimination requires assessment of the impact of all policies and programs on all genders, considering the surrounding circumstances of affected persons and implementing agencies. This may be achieved through four key steps.

First, it is necessary to undertake a context-specific gender analysis to understand the various interests and dynamics related to natural resources (Arjoud, Westerman, and Edmond 2015; UNEP et al. 2013).

¹⁸ On strategic environmental assessments, natural resources, and post-conflict peacebuilding, see Bouma (2012). On environmental impact assessment, natural resources, and post-conflict peacebuilding, see Kelly (2012).

Second, women's participation in formal and customary institutions governing natural resources should be promoted (UNEP et al. 2013). Participation may be enhanced through the use of quotas in decision-making bodies, soliciting input from women's groups when developing policies, including gender experts in teams tasked with developing natural resource policies, and building capacity of women to participate effectively.

Third, it is essential to create enabling conditions and remove barriers so that women can productively use natural resources (UNEP et al. 2013). Specific measures include ensuring equal access to credit, technical support, and capacity building opportunities; legal aid and other support in enforcing land and other resource rights; and land reform processes that enhance women's rights to land.

Fourth, it is often necessary to work with customary and religious institutions, engaging them in dialogue, providing assistance to women seeking to resolve disputes through customary and religious means, and removing practical barriers (NRC 2014).

For projects, it is necessary to design and implement the project with gender considerations in mind. This includes the development of an appropriate monitoring and evaluation framework, as well as periodic reviews to ensure that initial information and assumptions on gender dynamics still hold (Arjoud, Westerman, and Edmond 2015).

Youth

Youth, particularly young men, present special challenges to post-conflict peacebuilding. They do not yet enjoy the prerogatives of seniority, and in many cases may have limited rights to access land and other resources—rights that depend on permission of elders who may be reluctant to cede rights over land and other resources. An inability to access land or other resources (such as livestock) can prevent young men from securing permission to marry, making them susceptible to more violent forms of making a livelihood—namely, conflict (Lind 2015; McIntyre 2012). Indeed, the inability of many youth to access land was a contributing cause of Sierra Leone's civil war (Richards 2005). Youth have also become mobilized to violence where there was inequitable distribution of the substantial benefits associated with oil and gas extraction, for example in Nigeria (Mähler 2012).

During Sierra Leone's war, youth moved to urban centers and diamond mining regions; the end of the war, however, coincided with a downturn in diamond mining. A priority challenge for post-conflict Sierra Leone, then, was developing alternative livelihoods for hundreds of thousands of youth. Sierra Leone piloted an alternative livelihoods program—Life After Diamonds—which illustrated the viability of different approaches in providing livelihood alternatives to mining (Keili and Thiam 2015). These include, for example, reclaiming mining land for agriculture, microloans, job training, and assistance with developing business plans—many of them focused on agriculture and the associated value

chains. Efforts to expand livelihood opportunities in Colombia using agricultural value chains similarly emphasized the importance of involvement by youth (and women) (Castro and Stork 2015).

Efforts to integrate youth into the post-conflict economy face many challenges. These include migration to urban centers (away from agriculture-based opportunities), widespread unemployment, and participation in the informal economy (Young and Goldman 2015). The approaches for addressing these challenges and engaging youth in post-conflict governance of natural resources are similar to the approaches discussed above for indigenous peoples and women: assessment, engaging in developing policies, removing barriers, and working with customary and religious institutions.

Rule of law

A fifth key factor influencing the effectiveness of institutions governing natural resources is the rule of law. Armed conflict is the result of an inability to resolve disputes peacefully, and during armed conflict, there is often a transition to resolving disputes through might rather than through rule of law. Rebuilding the rule of law is thus central to post-conflict peacebuilding efforts. Post-conflict rule of law efforts range from legal reforms (e.g., promoting transparency) to administrative initiatives (e.g., addressing corruption) to dispute resolution efforts—and these often are in the context of natural resource governance (Cheng and Zaum 2016*). Rents from high-value natural resources may allow governments to operate without income taxes, insulating them from public accountability and contributing to a culture where authority derives from control of resource revenue streams rather than political legitimacy (Collier and Hoeffler 2012). With that said, rule of law is important to capture the full value of domestic revenues from natural resources, mobilizing revenues for service delivery. The conversion of resource revenues to personal benefit and power through corruption or violence is a pervasive risk in the chaos following conflict. Corruption and a lack of transparency in management of natural resources can contribute to the (re)emergence of conflict by absorbing income that could be used to address public economic and social grievances, for example by funding public services or community development projects (Cheng and Zaum 2016*).

Rule of law means that all persons, institutions, and entities, including the state itself, are accountable to laws that are publicly promulgated, equally enforced, and independently adjudicated, and which are consistent with international human rights norms and standards (UNSG 2004). Rule of law requires a strong and just normative framework; mechanisms to ensure that the normative framework is consistently and fairly implemented; and top-level political will to apply the mechanisms.

Strong institutions are not sufficient to ensure rule of law, particularly if the laws allocating rights to resources and distributing benefits are inequitable. In Myanmar, a strong central government controlled and developed timber, gemstone,

natural gas, and hydropower sectors to generate substantial revenues (Talbot, Akimoto, and Cuskelly 2016*). For example, in the 2006-2007 fiscal year, the government earned an estimated US\$300 million from rubies and jade alone. The government used this revenue and its control over natural resources to consolidate its power within the country and in the region, rather than to benefit the largely poverty-stricken population. In its rush to maximize profit and power, the government reportedly confiscated land and forcibly relocated populations, employed forced labor and child labor, and condoned physical violence against members of communities that opposed government projects to develop resources that they had historically used. Unsustainable exploitation practices has severely depleted the country's forestland and drained much of its biological and mineral wealth.

Just as strong institutions are necessary but insufficient to ensure rule of law, strong and fair laws are not sufficient to realize the rule of law. In the DRC, the World Bank and other international organizations supported development of a new mining code designed to promote transparency, sustainability, and fairness in the mining sector through creation of a mining registry and a contract review process (Garrett 2016*). However, high-level officials worked to prevent full implementation of these reforms in order to preserve opportunities for rent seeking that had been facilitated by the previously weak state of regulation. Ministers restricted funding to the mining registries, driving employees to resort to selling information as a source of income. The contract review process, intended to promote fairness and sustainability in the sector, was instead used as an additional tool for rent seeking and nepotism. Through the review process, mining contracts were cancelled to force renegotiation or to reassign contracts to friends and relatives of powerful elites.

Norms, mechanisms and political will related to three core areas are essential to the rule of law: legitimacy, transparency, and accountability. Such mechanisms can be grounded in the internal workings of the country, or—in extreme circumstances—imposed by outside governments, organizations, or private entities.

Legitimacy

Rule of law entails a prevailing culture in which people comply with norms because they are norms that constitute a social contract between citizens and their government, not only under threat of force or punishment (Thier 2009). Restoring the rule of law means restoring this system, social contract, and culture of lawfulness. New norms as well as the authority issuing and implementing them must be viewed as legitimate for the public to be willing to comply, and in order for norms to be legitimate they must be based on a social contract between the state and its citizens (Addison and Murshed 2001). This is both critical and challenging in the context of natural resources, which are essential to local economies, the national economy, and the conflict economy—all of which are competing for control over resources and their associated revenues (Mcintyre, Aning, and Addo 2002; Nitzschke and Studdard 2005).

Restoration of basic government functions and provision of basic services rebuild public trust and confidence in government, which are essential to government legitimacy. Effective and sustainable governance of natural resources plays a large role in meeting these goals. Water, land, fish, fuelwood and other natural resources are central to livelihoods in many post-conflict countries. Mineral and petroleum wealth can create important sources of government funding, financing for local development, and restoration of basic infrastructure. Electricity from hydropower, fossil fuels, and biomass is important both practically and symbolically to rebuilding legitimate governance. Thus, one of Ellen Johnson Sirleaf's campaign promises when she first ran for president of Liberia was to quickly restore electricity to the capital of Monrovia by the country's independence day (an objective that was partially met) (Polgreen 2006).

One of the most important government functions from the point of view of increasing legitimacy is conflict resolution and access to justice. Accessible and fair mechanisms for nonviolent resolution of grievances are essential for restoring confidence in government and preempting future conflict. Judicial independence from the political branches of government (namely the executive and legislative branches) is essential to ensuring a sense of fairness and legitimacy in post-conflict countries, thus proving that all people and institutions are bound by the law, even the government (Helmke and Rosenbluth 2009; Pendergrass 2010).¹⁹

Government legitimacy and capacity have a circular relationship. Strong and fair norms and institutions are necessary for legitimacy, which in turn is necessary for norms and institutions to be effective. While strong symbolic actions such as joining an international initiative or passing widespread legal reforms can help kickstart government legitimacy, a population made cynical by long-term political instability or bad governance may be wary of such gestures. In these cases, building legitimacy is a slow and incremental process in which governance changes translate into discrete, tangible results.

One of the largest obstacles to legitimacy is government corruption. Too often, natural resource governance in post-conflict states must reverse rent seeking, nepotism, misappropriation, extortion, and other corrupt practices that date from the conflict and often before the conflict. Pressure to deliver peace dividends, combined with high aid flows and weak state institutions, may create additional opportunities for corruption in the immediate post-conflict period, particularly since large amounts of foreign aid are routed outside of government bodies (Large 2005). Corruption may even be tacitly accepted—either as a means of facilitating peace by buying the cooperation of warring parties with control over valuable state resources, or of stabilizing internal order by drawing opposition movements into patronage networks (Cheng and Zaum 2016*). While such strategies may have short-term benefits, these benefits are typically outweighed by the danger

¹⁹ Gretchen Helmke and Frances Rosenbluth (2009) note that judicial independence is not necessarily essential to rule of law where there is widespread support for individual rights, a condition that few if any post-conflict countries face.

of entrenching a criminalized economy based on theft of public assets by a wartime elite (Taylor and Davis 2016*). Entrenching a criminalized economy can undermine the legitimacy of government institutions and rekindle grievances over wealth and power distribution, ultimately leading to more conflict. (Cheng and Zaum 2016*).

The reality of corruption in post-conflict situations must be addressed head-on. However, corruption is a controversial issue, and has at times been taboo in international dialogue, as donors seek to avoid offending post-conflict governments. This is counterproductive, and potentially expensive (if conflict relapses). That said, it is important not to let “corruption” become the scapegoat for all governance problems in a post-conflict country, and to recognize that some cases of corruption stem not from moral invidiousness, but from misunderstandings extending from the collision of incompatible cultures (Le Billon 2003).

Transparency and accountability, discussed below, are some of the most important tools for combatting corruption (Le Billon 2006). In addition, in some cases it is necessary to address the drivers of corruption. At lower levels, corruption can be tied to inadequate funding, driving unpaid employees to rely on bribes or misappropriation of funds as sources of income. At higher levels, political instability may create incentives for elites to maximize illicit profits while they can.

Participation, dialogue, and public engagement (discussed above) are necessary but often ignored approaches to build legitimacy. Participation not only helps strengthen norms and ensure equity, it also builds a sense of ownership on the part of participants. However, participation must be meaningful—that is the decision maker must be genuinely receptive to the participation and not just consider it to be a mechanical step to be taken on the way to doing what it has already decided it will do—and must involve all relevant stakeholders in order to be effective at improving perceived legitimacy (Bishop and Davis 2002; Reed 2010).

Transparency

Transparency refers to the degree to which the public has access to information regarding decisions and decision-making processes (Claps 2008). By providing the public with information on governance processes—and particularly those affecting natural resources and the environment—transparency enables the public to better understand the challenges, options, and decisions that the government is facing (Coglianese, Kilmartin, and Mendelson 2008). With this understanding, members of the public can decide whether they want to participate in the public discourse and in what way. This understanding can also help improve government legitimacy, in part by making it harder to conceal corruption and other malfeasance. Transparency and participation can improve the quality of government decisions: a review of 233 instances of public participation in environmental decision making in the United States found that in 68 percent of the cases, the

990 Governance, natural resources, and post-conflict peacebuilding

decisions were substantively improved (Beierle and Cayford 2002). Transparency also improves the business climate for investment, as seen in Nigeria where enhanced transparency within the government contributed to making it one of the top three foreign investment destinations in Africa in 2014 (OECD 2015; Ajufo 2015). Transparency can help manage public expectations related to natural resource sectors (including the magnitude of benefits likely to be shared), as unmet expectations can drive social conflict in natural resource sectors (UN DPA and UNEP 2015).

The key elements of transparency are (1) timely publication of laws and regulations, (2) regular disclosure of information as required by law (involving both active and passive forms of transparency),²⁰ (3) dedicated information management and disclosure platforms, (4) methods of disclosing information adapted to the needs of different groups, (5) timely responses to public requests, and (6) availability of a clear, fair, timely, and effective mechanism for appealing denied requests (Davis et al. 2013). In natural resource-related sectors, it is important to have transparency regarding:

- the state of natural resources and the environment;
- the laws, regulations, standards, processes, and administrative procedures governing natural resources and the environment;²¹
- ownership, use, and access rights to natural resources, for example through cadastres and registries;
- natural resource-related concessions and contracts, including the contract conditions and environmental and social performance standards;
- the bidding process for natural resource-related concessions (a public bidding process can greatly increase revenues);
- environmental, social, and economic impacts of proposed projects, concessions, and other decisions;
- sharing of revenues and other benefits from natural resource extraction; and
- judicial decisions and arbitrations, which can promote a sense of fairness and justice, as well as allowing for some degree of consistency in decisions within and between jurisdictions.²²

For example, after large deposits of off-shore oil and gas were discovered in São Tomé and Príncipe, the government received a private offer of US\$20 million

²⁰ Active forms of transparency occur when the government affirmatively collects and disseminates information; passive forms of transparency occur when the government provides information upon request (Oliver 2004).

²¹ In many countries, laws are only available in printed books, which must be purchased at prices which most of the population cannot afford (Poulin 2004).

²² Judicial consistency is often important to establishing rule of law. As Laura Grenfell points out, adherence to precedent and predictability of judicial decisions are strong Western legal values which may not be shared by traditional legal systems in many countries (Grenfell 2013).

in signing bonuses for the twenty blocks that were to be auctioned. Instead, the government sought capacity building, adopted a new law, and auctioned the blocks one at a time. The signing bonus for the first block was US\$123 million, with the signing bonuses for the first six blocks totaling US\$515 million, and the twenty blocks may earn the government as much as US\$1.8 billion in signing bonuses through public auctions—about 100 times the private offer (IRIN 2004, 2005).

Increasing transparency requires finding ways to meaningfully communicate relevant information to all members of the public, particularly those most affected by decisions. However, not everyone has equal access. In improving transparency, it is thus important to consider the medium of communication of information. The internet can quickly and affordably disseminate information about government processes and natural resources (Internet Society 2015). However, while access to the internet is increasing across the world, this access is unevenly distributed. Wealthier, more educated, and more urban populations tend to have greater internet access (and thus more access to this information), while poor and marginalized groups, such as women and indigenous populations, disproportionately lack access (James et al. 2011). In these cases, alternative mechanisms such as text messages, radio, or direct verbal or visual outreach campaigns may be necessary supplements. Language and literacy can also provide barriers to access to information (McKinsey & Company 2014).

International initiatives can also help promote transparency. Under the Extractive Industries Transparency Initiative (EITI), for example, countries commit to disclosing all payments made to governments by companies operating within the oil, gas, and mining sectors. Under EITI, the country discloses payments received, companies disclose payments made, and a comparison of the payments received versus payments made is an important check on corruption (Rich and Warner 2012). While EITI applies only to extractive (non-renewable) natural resources, a growing number of countries led by Liberia have extended EITI to apply to other sectors such as forestry and rubber. There are some key limitations to EITI: it does not require transparency in either the concession process or in spending the revenues, but again countries have started to extend the EITI framework to these domains (Siakor n.d.). Moreover, the EITI process has also provided an important forum for dialogue between stakeholders and for discussing larger questions of natural resource governance (Rich and Warner 2012).

The international Publish What You Pay (PWYP) campaign brings together national and civil society organizations in various countries to advocate for increased transparency in the extractive sectors. In Côte d'Ivoire, PWYP worked with Ivoirian civil society on an extensive campaign to improve transparency and raise awareness about corruption in the oil, gas, and mineral industries, and was instrumental in driving the country's participation in EITI (Yoboue 2016*).

Lack of transparency can be as much a problem of capacity as of will. It is important to identify the cause of the problem in order to effectively address it.

992 Governance, natural resources, and post-conflict peacebuilding

Where the problem is lack of will, accountability mechanisms—such as those described below—as well as pressure from the international community and from domestic civil society can help encourage increased transparency. For instance, when the UN Security Council lifted the sanctions on international trade in Liberian timber and diamonds in 2006, it established a panel of experts to monitor Liberian implementation of forestry legislation and compliance with the Kimberley Process Certification Scheme, applying external pressure on the Liberian government to keep its promises (UNEP 2013a). International and domestic civil society can shine light on government practices and the state of natural resource exploitation through independent investigation and public dissemination of results. Where the problem is lack of capacity, additional support may be required, including technical training of personnel; funding for new systems and technologies for improving information collection, management, and dissemination; and assistance in developing standard procedures for ensuring consistent transparency in government processes at all levels. Natural resources can provide a source of funding for these programs, but where natural resource management is weak, initial funding may need to come from international donors and other sources.

Accountability

Courts and other accountability mechanisms help improve rule of law and combat corruption by holding both public (governmental) and private actors responsible for their actions. Accountability mechanisms are essential to post-conflict peacebuilding, as they provide a peaceful means of resolving disputes; transitional justice mechanisms also provide a means of addressing grievances arising from wartime actions (Harwell 2016*). Transparency is important to accountability, but accountability mechanisms go beyond transparency by imposing direct consequences for acts of corruption and other malfeasance. Like other mechanisms to improve rule of law, accountability-based mechanisms can originate within a country (for example, through a country's judiciary) or can be imposed by international or foreign actors (for example, through other country's courts or through international tribunals) (Vialle et al. 2016*).

The judiciary provides a significant source of accountability in well-functioning government systems. Rule of law demands that no individual be above the law by virtue of political power, government position, or otherwise. Realizing this goal requires a strong, capable, and independent judiciary, with the will and wherewithal to uphold the law and hold all wrongdoers accountable.

In weak or fragile situations, particularly following conflict, domestic judicial institutions may not be capable of this level of accountability. In these situations, in addition to programs to strengthen domestic judiciaries, international organizations and foreign governments can take various measures to strengthen accountability. These measures can take several forms, ranging from due diligence

requirements related to supply chains²³ to asset freezes and other sanctions against individuals²⁴ to criminal prosecutions in foreign or international courts (Vialle et al. 2016*).

International organizations and foreign countries can also regulate companies to ensure that they do not encourage corruption or bad governance, either directly or through their supply chains. For example, the U.S. Foreign Corrupt Practices Act requires all companies registered on the U.S. securities exchange to keep accurate records of all financial transactions, and provides a basis to prosecute U.S. companies for paying bribes to foreign officials.²⁵ In 2010, the U.S. Securities and Exchange Commission fined seven companies in the oil services industry a total of more than US\$200 million for bribing customs officials in foreign countries, including Nigeria, Kazakhstan, and Angola (SEC 2010; Matthews 2012).

A growing number of international tribunals and foreign courts are prosecuting and otherwise hearing cases related to environmental violations associated with armed conflict. Some cases relate to the wartime pillage of natural resources, as in Uganda's illegal occupation and extraction of natural resources from Eastern DRC (Vialle et al. 2016*). Other cases relate to the illegal trade in conflict resources in violation of UN Security Council Sanctions, as in Dutch, Belgian, and other prosecutions for trade in Liberian timber. A few cases relate to the deliberately harming natural resources during armed conflict, as in the poisoning of wells in Darfur, Sudan associated with a genocidal campaign. A number of these cases are decided in the broader context of transitional justice (Harwell 2016*; Vialle et al. 2016*).

Governments and international entities can take measures to encourage or require companies to exercise control over their supply chains to ensure that their products do not contain materials or resources sourced in a way that encourages bad governance. For example, the OECD promulgated Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, which provides nonbinding standards for companies to avoid mineral purchases that contribute to conflict or human rights violations (OECD 2013b). The U.S. Dodd-Frank Act requires U.S. companies to disclose whether their products contain coltan, cassiterite, gold, wolframite, or any other conflict mineral originating in the DRC or an adjoining country, and report on measures they have taken to manage the source and chain of custody of such minerals.²⁶ As of December 2015, the European Union was in the process of adopting similar due diligence requirements (Niemiec 2015). The Kimberley Process Certification Scheme is another regime that seeks to ensure that the diamond trade does not finance armed conflict or otherwise support human rights violations (Grant 2012;

²³ See discussion of the Dodd-Frank Act and the Kimberley Process Certification Scheme at note 22 and accompanying text.

²⁴ On sanctions and natural resources, see Taylor and Davis (2016*).

²⁵ The Foreign Corrupt Practices Act of 1977, 15 U.S.C. 78dd-1 et seq.

²⁶ Dodd-Frank Wall Street Reform and Consumer Protection Act, 2010, 12 U.S.C. 5301.

994 Governance, natural resources, and post-conflict peacebuilding

Epstein and Yuthas 2011). Due to the voluntary nature of the certification scheme, though, it has experienced difficulties with compliance with and enforcement of its standards, for example in Central African Republic and Zimbabwe (Smillie 2014; Global Witness 2011).

The international community can support such supply chain initiatives through databases and certification schemes. In central Africa, the International Conference on the Great Lakes Region (ICGLR), working with international organizations and civil society, has developed a regional supply chain certification mechanism designed to fight the illegal exploitation of natural resources while continuing to promote and facilitate investment in the region.²⁷ The mechanism is designed to work through national supply chain certification schemes which track chain of custody, publicize data on mineral flows, and employ regular, independent third-party audits (Blore and Smillie 2011; UNU and ITU 2012).

Both domestic and international accountability mechanisms are essential to fighting corruption and restoring government legitimacy and rule of law. Moreover, in the long term, improving accountability and rule of law—including the adherence to commercial contracts and natural resource concession agreements—can increase foreign investment (Klein and Joras 2016*).

ESTABLISHING GOOD NATURAL RESOURCE GOVERNANCE FOLLOWING CONFLICT

Conflict affects natural resource management agencies and legal structures. Institutions for natural resource management may be devastated, disbanded, or discredited during conflict, leaving regulatory gaps or shifting responsibility to traditional institutions and other alternative sources of authority. Peace agreements and post-conflict power shifts can create new institutions or transform existing ones, sometimes resulting in overlapping and conflicting spheres of authority.

This can result in regulatory gaps in the natural resource sector, allowing unchecked and often harmful exploitation and profiteering. In Mozambique, for example, rural areas were largely under rebel control during the war. When the war ended and the rebels withdrew from the countryside, it created a power vacuum. This allowed illegal logging operations to move in before displaced communities had returned and before the government had reestablished full control. During the immediate post-conflict period in the 1990s, many of Mozambique's forests were completely cleared of their commercial timber (Oglethorpe et al. 2016*).

²⁷ Lusaka Declaration of the ICGLR Special Summit to Fight Illegal Exploitation of Natural Resources in the Great Lakes Region, Lusaka, Zambia, December 15, 2010; International Conference on the Great Lakes Region, Regional Programme of Action for Economic Development and Regional Integration, Project No. 3.2.2, Regional Mechanism for Certification of Natural Resources Proposal, February 2006, amended August 2006.

Such mismanagement of natural resources characterize the post-conflict situation in many countries, and create significant obstacles to the establishment of good governance across sectors, as well as to restoring livelihoods and economic growth. To overcome these obstacles, governments, peacekeepers, humanitarian and development agencies, private investors, donors, and other actors involved in post-conflict peacebuilding must acknowledge and consider the relationships between natural resources and governance. There are three key stages in which these relationships may be addressed: (1) assessment and planning; (2) rebuilding governance frameworks; and (3) humanitarian and development programming;

Assessment and planning

A post-conflict society is less a unified system than a collection of complex systems in a state of rapid flux, and this flux brings substantial risk of relapse (Webersik and Levy 2016*). Natural resource governance after conflict is compounded by the inherent complexity of natural systems and the fundamental connections of these resources to human survival, economic well-being, and cultural identity (Folke et al. 2005; Green 2015). Moreover, the uncertainties surrounding post-conflict governance of natural resources will be exacerbated by the effects of climate change, even as the need for mitigation and adaptation opens new avenues for linking intact ecosystems with development (Matthew and Hammill 2012; Carius and Maas 2012).

In the face of such complexity, a nuanced understanding and adaptive approaches are essential to effectively rebuilding post-conflict governance. Failure to adequately assess the social, cultural, economic, and environmental situation before proceeding with peacebuilding activities is a recurring cause of unexpected and negative consequences across all sectors (Grundel 2010).

A growing body of tools and approaches has emerged for undertaking post-conflict environmental assessments in post-conflict countries—including post-conflict assessments and post-conflict needs assessments—with the twin goals of avoiding relapse into conflict and maximizing the beneficial effects of natural resource governance (Jensen and Lonergan 2012; Jensen 2012; Conca and Wallace 2012). Assessments inform planning processes, and both assessment and planning guide programs and projects to improve post-conflict governance.

To the extent possible, such assessments should consider not only resource status, trends, and the political economy of natural resource use, but also the state of infrastructure for management and the perspectives, capacities, and likely responses of affected stakeholders. Consultation is an integral component of the assessment and planning process, serving to both inform programming (i.e., improving the analysis) and develop ownership and trust (i.e., improving the legitimacy of the analysis). The chapters in this book set forth lessons related to prioritizing environmental assessments, conducting assessments, and consultation.

Prioritizing environmental assessments

Assessment efforts must be balanced against the urgent need for action. In the early stages of peace, governments and organizations are under significant pressure, both real and perceived, to produce rapid, visible signs of progress and generate concrete peace dividends. At the same time, without adequate assessment, immediate action can make the post-conflict situation worse by depleting the resource base, fueling conflict, or putting in place ad hoc and unsustainable procedures that ultimately become permanent (Grundel 2010; Jensen and Lonergan 2012).

In its agricultural development projects in Nigeria in the late 1990s and early 2000s, the World Bank failed to adequately assess the environmental situation and relationships between resource users in the project area. The focus on increasing agricultural production added to existing stressors like climate change and migration to exacerbate conflicts between agriculturalists and fishermen, pastoralists, hunters, gatherers, and other resource users. The Bank and Nigeria learned from this experience, and in subsequent efforts in the same region, there were detailed social, environmental, and cultural assessments, leading to the development of programs that emphasized conflict resolution mechanisms, transparency requirements, and involvement and participation of multiple stakeholders (Ruckstuhl 2016*).

Assessment can and should be scaled to the time and resources available. Comprehensive assessments do not necessarily have greater impact than quicker, less thorough assessments (Jensen and Lonergan 2012). Rather, it depends on the context. More rapid assessments (often done largely using existing data) are often necessary immediately following conflict, and if done quickly these assessments can inform the broader prioritization of peacebuilding programs and the donor conference that typically occurs after a peace agreement. In contrast, a comprehensive assessment is more useful when trying to build consensus among stakeholders of the priorities, challenges, and way forward.

Immediately following conflict, rapid assessments can be used to determine immediate needs and set priorities (Jensen and Lonergan 2012; Conca and Wallace 2012). Though rapid assessments often focus on environmental hotspots, security risks, and urgent humanitarian needs, they can be broadened to incorporate a quick assessment of the state of institutions and governance infrastructure. Such assessments can identify which natural resource governance reforms are likely to have the largest pay-off in terms of stabilizing the political situation, supporting livelihoods, addressing security risks, and building confidence in the new government.

When possible, data collection should begin during the conflict. Often donors know that they will be involved in a post-conflict effort in a certain nation that is still in the throes of hostilities, and collecting the data during the conflict can expedite the analysis and prioritization process when peace comes. If, once the nation enters a post-conflict stage, all of the data is available to be analyzed, donors and other actors will be able to work more quickly and efficiently in developing and implementing a peacebuilding plan. Of course, care needs to be

exercised in collecting and using the data. Out of respect for state sovereignty, international organizations typically do not begin collecting country-specific data unless it is a part of regular global monitoring of acute environmental risks.

Conducting assessments

In developing strategies for rebuilding governance following conflict, needs assessments and impact assessments are critical. Needs assessments evaluate the state of the environment and infrastructure as well as the social, political, and economic situation following conflict, in order to set priorities and subsequently evaluate the impact of projects and programs (against the baseline in the needs assessment). Impact assessments estimate the specific impacts of a specific project or process on natural resources and social and political structures. Three types of impact assessments are worth noting: certain post-conflict environmental assessments, environmental and social impact assessments, and strategic environmental assessments. Some post-conflict environmental assessments evaluate the impact of the conflict on natural resources and the environment, and many post-conflict environmental assessments serve more as needs assessments guiding post-conflict programming (Jensen 2012). Environmental and social impact assessments seek to inform project-specific programming (Jensen and Lonergan 2012; Kelly 2012). Strategic environmental assessments seek to inform programmatic and policy decisions (Bouma 2012).

Needs assessments following conflict can be used to set priorities and shape programming. They can take the form of rapid assessments (as discussed above) or more detailed and comprehensive post-conflict needs assessments (PCNAs), undertaken by national governments together with international agencies. PCNAs feed into more comprehensive peacebuilding and recovery plans, which prioritize activities and channel funding from international donors (Jensen 2012). Individual humanitarian and development organizations, foreign militaries, and peacekeeping missions can also conduct their own needs assessments focused on their areas of expertise. Regardless of who conducts the needs assessment, it is important to ensure that these assessments include consideration of governance and natural resource-related issues, especially where natural resources contributed to the conflict. This is the first step in making sure these issues are included on the peacebuilding agenda.

Before new projects are implemented or missions deployed, it is important to have a good idea of the potential impacts of the project or mission on social, political, and economic structures and on the natural environment. Environmental and social impact assessments (ESIAs) can help identify potential issues that need to be addressed and avoid unwanted side effects. In post-conflict situations, ESIAs tend to be streamlined, fast-tracked, or reduced to simple environmental reviews (Kelly 2012). The expedited process is deemed necessary in light of the pressing early need to provide basic services and rebuild, and a lack of financing, planning, or data. The extent to which ESIA processes are streamlined and

expedited needs to be considered carefully, so that there is adequate consideration of the environmental and social impacts of peacebuilding activities—and that the failure to adequately consider these impacts does not undermine the effectiveness or legitimacy of peacebuilding efforts.

Assessments should go beyond potential impacts on the natural environment to include impacts on different resource users and on resource governance systems, as development projects can create or exacerbate conflicts between users or disadvantage marginalized groups (Ruckstuhl 2016*; Klein and Joras 2016*). Gender analysis is also critical (Karuru and Yeung 2016*).

Assessments are essential to conflict-sensitive programming. Well-intentioned decisions and projects in different natural resource sectors can generate grievances and tensions, if improperly planned and implemented. Policies and projects can restrict peoples' access to key livelihood resources, inequitably distribute resource benefits, create or reinforce power asymmetries, or introduce additional burdens and risks on a given population or gender (Oglethorpe et al. 2016*; Coyle et al. 2014). It is essential for development partners and extractive companies to understand how their activities linked to natural resources interact with the local conflict and gender context, especially in situations of fragility. This approach should focus on potential conflict risks and peacebuilding opportunities from policies and projects, as well as the potential impact they could have on women's involvement in natural resource management (Karuru and Yeung 2016*). External actors should also constantly assess how their interventions are interacting with and influencing local peace, conflict, and gender dynamics throughout implementation.

Conducting assessments following conflict can be challenging, as relevant data and informational infrastructures may have been neglected or destroyed. In Rwanda, for example, scientific research facilities and environmental monitoring stations were severely damaged during the genocide, and many of the country's long-term environmental data sets were lost (Brooke and Matthew 2016*). These losses created major gaps in scientific knowledge and in the state's capacity for systematic environmental monitoring, posing significant challenges for the post-conflict reestablishment of environmental governance.

Assessment should be an ongoing, iterative process that continues after measures have been adopted and programs implemented. Environmental and social circumstances are constantly changing, particularly following conflict, and constant monitoring is necessary to ensure that measures remain appropriate and up to date. As such, building governance is a process consisting of recurring cycles of analysis, consultation, and commitment (UNEP 2013a).

Consultation and inclusion

Consultation is an invaluable tool for assessing natural resource and institutional needs and baselines, and for developing governance and natural resource management strategies and capacity. Consultation is key to identifying the most appropriate governance tools, anticipating challenges to implementation, and

assessing the effectiveness of a system on an ongoing basis. As discussed above, public engagement increases ownership of the analytic process on the part of those who participate. This is important for improving compliance and implementation of governance reforms.

Different stakeholders have unique interests, perspectives and knowledge that should inform the process of restoring effective governance. Consultations with individuals and communities can help clarify existing natural resource management structures and mechanisms, including traditional and informal governance structures. While local civil society groups will have their own perspectives and agendas, they also have access to contextualized information that is necessary for a comprehensive picture.

Consultation with diverse stakeholders is also important for building ownership and trust among stakeholders, and restoring government legitimacy following conflict (Carius and Maas 2012; Oglethorpe et al. 2016*). While it carries the risk of politicizing facts and knowledge, including local actors in conducting the assessment and developing the recommendations is the only way to create ownership in the information and the activities that follow (Yilmaz, Beris, and Serrano-Berthet 2008; Mercy Corps 2007). The post-conflict environmental assessments with the greatest impact have been those that involved national experts in the assessment process and that included large public consultation and validation workshops, for example in Sudan (Jensen 2012).

Both domestic and international actors need to undertake consultation. While international actors frequently recognize the importance of transparency and inclusion to natural resource governance, they are not always transparent or inclusive in their own assessment, planning, and programming. For example, the Aceh Green development strategy, devised by the new government of Aceh, Indonesia in conjunction with international conservation groups, emphasized transparency and democratic engagement, but the strategy was actually developed and announced with little public participation (Lakhani 2016*). A study of early experience with the implementation of Aceh Green found that some of the most important initiatives, including a major project to reduce emissions from deforestation and degradation (REDD) had likewise moved forward without sufficient stakeholder consultation and participation. Such failures can shake public confidence in and support for natural resource management projects.

Rebuilding governance frameworks

Rebuilding governance and restoring the rule of law usually entails more than simply reviving institutions and resuming application of laws that were in place prior to the conflict. During conflict, portions of a country—sometimes substantial portions—suffer from a lack of national capacity to govern effectively, whether due to insecurity or the government's focus on the conflict. The rule of law and popular trust in government are replaced by fear and the rule of the gun. Many conflict-affected populations have largely turned away from the formal legal

1000 Governance, natural resources, and post-conflict peacebuilding

system. After a conflict ends and the society seeks to transition to a durable peace, it can be unclear which law applies. Often legal systems do not have the capacity to address property rights, corruption, or other stabilization and reconstruction challenges at hand. Indeed, issues related to property rights and corruption often predate the conflict and may have constituted grievances that were contributing causes to the conflict.

Legal and institutional reform—including in the natural resource sector—is therefore usually a core component of reestablishing governance following conflict. New governance frameworks are often grounded in principles espoused in peace agreements, elaborated through sector-specific framework laws, and implemented by administrative agency regulations and determinations. At the same time, governments—with the support of civil society and the international community—often must forge and maintain transboundary relationships with other states in the region in order to ensure continued stability. Natural resources are important to each of these processes. Each is impossible without sufficient political will. This subsection therefore presents lessons on natural resource considerations related to (1) negotiating peace agreements, (2) developing national legal frameworks, (3) building transboundary relationships, and (4) generating and sustaining political will for reform.

Developing and implementing governance frameworks can be time consuming and daunting, particularly given the capacity constraints of post-conflict countries and the urgent need for governance to resume as quickly as possible. It is tempting to use ad hoc measures to address immediate needs, rather than taking the time to design and implement workable permanent legal systems. Indeed, discrete ad hoc measures can sometimes address immediate challenges sufficiently to secure additional time for the government to undertake more substantial reforms.²⁸ The period immediately following the cessation of conflict often creates a limited window of opportunity for reforms, during which time it is often possible to amend laws and institutions governing land, minerals, water, and other natural resources. This window closes, though, and there is a real risk that temporary measures instituted following conflict become entrenched and difficult to change. Because gaps and failures in ad hoc systems can contribute to ongoing emergencies which continue to divert time, attention and resources from developing permanent and sustainable governance structures, it is important to prioritize developing enduring and sustainable legal and governance reforms from the earliest stages of peacebuilding.

Negotiating peace agreements

Most conflicts end by peace agreements, rather than outright military victory. Indeed, since the mid-1980s, 70 percent of armed conflicts reach negotiated

²⁸ For an example of an ad hoc amendment to Sierra Leone's laws governing land, see Unruh and Williams (2013).

conclusions or fizzled, rather than ending in victory for one side; and from 2000 to 2005, negotiated settlements to conflicts, including peace agreements, outnumbered military victories by a ratio of more than four to one (17 to 4) (Call and Cousens 2008; Human Security Centre 2006). Peace agreements establish the architecture for a new government and governance approaches, and are often the first step in developing new institutions, legal frameworks, and social contracts following conflict. However, even where natural resources played a role in instigating or perpetuating conflict, for decades they were largely ignored in peace agreements—at least until the early 2000s. Between 1946 and 2006, fewer than one-quarter of peace negotiations to resolve conflicts involving natural resources have addressed natural resource management; in the last ten years, though, every major peace agreement has included provisions on managing natural resources, and many included multiple provisions addressing different resources and peacebuilding priorities (UN DPA and UNEP 2015; UNEP 2009).

In the pressure to stop the fighting and restore security, natural resources can seem less important. However, as demonstrated throughout this series of books on post-conflict peacebuilding and natural resource management, natural resources are inextricably linked to peace and security goals. Resource scarcity, environmental change, and dependence on resource revenues have been identified as significant risk factors that can contribute to conflict relapse in post-conflict countries (Webersik and Levy 2016*). Because peace agreements set the post-conflict agenda, incorporating natural resource provisions, however vague, in peace agreements can be essential to effectively addressing these issues (Dawes 2016*; Mason, Sguaitamatti, and Gröbli 2016*). In many instances, it is not practical to resolve natural resource issues in a peace agreement; rather, provisions provide a mandate and some policy direction for subsequent processes to address and resolve natural resource governance challenges (UN DPA and UNEP 2015).

Historically, when natural resources were considered in peace negotiations, they were often treated as bargaining chips to be divided among factions, or as sources of quick and easy revenue to be exploited in the name of recovery (Mason, Sguaitamatti, and Gröbli et al. 2016*; Harwell 2016*; Talbott, Akimoto, and Cuskelly 2016*). Such strategies, however, can create substantial risks by provide funding for renewed insurgent campaigns and for entrenching a criminalized economy that undermines the development of democratic governance (Taylor and Davis 2016*).

Natural resource provisions in peace agreements often seek to address problems and inequities in previous systems, including those that may have contributed to the conflict. In Guatemala, conflict was spurred by unequal land distribution that consolidated much of the country's arable land in the hands of a small group of individuals and business (Mason, Sguaitamatti, and Gröbli et al. 2016*). The peace agreement ending the conflict attempted to address this by creating a land fund to facilitate market-assisted reform by regulating and granting credits for land purchase. Due to a lack of political will at the top levels and to resistance

1002 Governance, natural resources, and post-conflict peacebuilding

from the private sector, implementation of the new management scheme faltered. Five years after the 1996 peace agreement, land had been distributed to 10,000 of the estimated 500,000 families that needed land (MINUGUA 2002; Tanaka and Wittman 2003), and by 2010, 2 percent of the population owned 72 percent of the arable land in Guatemala (Mason, Sguaitamatti, and Gröbli et al. 2016*).

When considering whether and how to include natural resources in peace agreements, the UN Department of Political Affairs (UN DPA) and UNEP highlight seven key lessons:

- (1) Context is extremely important;
- (2) Effective mediation requires a clear but nuanced mapping of actors and interests;
- (3) Equal access to impartial scientific and technical information about the resource in dispute is key;
- (4) Careful attention is needed to identify the stakeholders that should be engaged in the mediation process;
- (5) Mediation should aim for collaboration over shared benefits, which can generate the trust needed to tackle other issues;
- (6) Mediation techniques are available to overcome critical impasses and entrenched positions; and
- (7) Natural resource issues in peace negotiations are frequently addressed to lay the foundation for future reforms, and not necessarily to resolve problems immediately (UN DPA and UNEP 2015, 7-8).

Furthermore, the UN DPA and UNEP indicate that natural resource provisions should be included in the peace agreement if “[n]atural resource ownership, access, or wealth-sharing is a contributing cause or trigger of conflict”; “[n]atural resource revenues are used to finance the conflict”; or “[n]atural resources have been damaged, degraded, or destroyed during the conflict” (UN DPA and UNEP 2015, 47).

Developing national legal frameworks

While a peace agreement can outline a plan or principles for allocating and managing natural resource, national laws and regulations are key to creating a workable system of natural resource governance and management. The system must be sufficiently comprehensive and detailed, while also appropriate to local norms and practices (Nichols and Al Moumin 2016*²⁹). This requires a thorough understanding of the complex and often pluralistic social and legal context, including the interests and perspectives of all relevant stakeholders. It also requires significant resources, capacity, and time—all of which are in short

²⁹ See the discussion in the section on adequate and appropriate norms, above

supply following conflict. Once again, there is a practical tension between the urgency of post-conflict needs and the time it takes to create effective and appropriate legal tools, institutions, and capacity.

International entities and regional organizations can contribute to the development of legal frameworks by building capacity, contributing expertise, and work with countries to develop legislation. For example, the Central American Commission on Environment and Development (Comisión Centroamericana de Ambiente y Desarrollo, or CCAD) has worked with Central American countries since they were emerging from conflict in the mid-1990s to develop model legislation on the environment and natural resources, and supports the adoption and implementation of this legislation by its member states throughout Central America (King et al. 2016*). CCAD has thus supported not only post-conflict recovery, but has also facilitated regional political and economic integration. While such international support can be important, ultimately the process of developing new legal frameworks following conflict must be owned and carried out by legitimate national and local actors (IDPS 2011).

Post-conflict governments can analyze approaches (including laws and institutional arrangements) of other countries, examine the relative successes and challenges of these approaches in those countries, and consider whether and how to adapt these approaches to their particular context (Nichols and Al Moumin 2016*). Consideration of other countries' experiences and practices can expedite the process of developing legal frameworks, making it easier and cheaper. There can be political and practical obstacles to incorporation of laws and institutional approaches from other countries. Newly independent countries often have to develop a complete new legal canon, and while they may be most familiar with the legal and institutional frameworks of the country that used to govern them, but there may be strong political desires to not allow that country to continue to govern their behavior through the lame-duck laws. For example, Timor-Leste refused to allow Indonesia's land law to continue to apply while the new country debated and adopted a new land law; more than fifteen years after independence, however, Timor-Leste still has yet to adopt a land law, and there is no legislation governing land in the country (Unruh and Williams 2013).

Direct importation of legal and institutional frameworks rarely works. There is no ownership of the underlying policy choices, and imported frameworks do not reflect the local political, legal, social, cultural, or economic contexts. Accordingly, imported laws risk being ignored or conflicting with the existing context—in neither case, do they lead to lasting change. For example, money laundering legislation adopted in Bolivia, Colombia, and Peru in part to address trade in illicit crops, closely followed international standards but failed in the context of the large informal economies, underdeveloped financial sectors, and flexible property rights that characterize the Andean region (Thoumi and Anzola 2010).

For these reasons, adaptation of legal and institutional arrangements is strongly preferred over importation. To effectively adapt good practices and

1004 Governance, natural resources, and post-conflict peacebuilding

approaches from other countries to the local context, though, it is necessary to engage stakeholders and the broader public to build support for reforms, and identify what approaches may need to be adapted and in what manner.

Developing legal frameworks requires balancing appropriateness, legitimacy, feasibility, and efficiency. In some cases, the situation may require bottom-up development of new legal systems. For example, forest reform in Nepal relied on a participatory process over a period of many years that helped build a shared vision of the policy priorities and appropriate institutional approach (Nichols and Al Moumin 2016*).

Many post-conflict countries with strong customary and religious norms and institutions—especially governing land and other natural resources essential to local livelihoods—have found it most effective to adopt statutory frameworks that account for customary and religious law. This is discussed above in the context of legal pluralism.

Governance of natural resources after conflict should take care to avoid perpetuating governance abuses of the past, and to that end should emphasize openness and responsiveness to the public. Governance reform programs should recognize that they are reforming the relationship between people and government as well as that between people and natural resources. A carefully designed and equitable program that is not explained to the population may appear as arbitrary and biased as the pre-conflict approaches that may have been characterized by inequity and corruption. By showing that the process of policy formation and decision making has changed, governments can amplify the peacebuilding impact of natural resource management changes.

Building transboundary relationships

Neither natural resources nor conflict dynamics respect national borders. The security situation in one country can have political and security spill-over effects across the region. Likewise, many natural resources and trade in natural resources and their products are increasingly transboundary in nature. Therefore, international and regional cooperation forms an integral component of post-conflict governance frameworks, with transboundary governance structures seeking to support countries in managing and sustainably exploiting natural resources. At the same time, natural resources can play an important role in building and maintaining transboundary relationships.

Following international armed conflict, natural resources can provide an entry point for transboundary cooperation. The creation of a transboundary park in 1998 helped to resolve a 170-year-old territorial dispute between Peru and Ecuador (Kakabadse, Caillaux, and Dumas 2016*). The peace agreement between the two countries stipulated the creation of demilitarized conservation zones on either side of the disputed border. The conservation area provided a means (among a number of means) to rebuild cooperative relations between the countries, beginning with joint conservation and natural resource management projects,

such as a project for joint management of the Catamayo-Chira river basin. Though pressure from mining and development interests limited the environmental impact of these projects, they did help to build trust and confidence between the countries, which spilled over into other sectors such as economic relations.

Transboundary relationships are not always created from the top down. In the Greater Virunga Landscape, covering parts of DRC, Rwanda and Uganda, park rangers and technical experts from the three countries communicated and cooperated with the goal of protecting endangered mountain gorilla populations, with substantial assistance from international organizations and NGOs (Refisch and Jenson 2016*). These relationships survived conflict and breakdowns in communication between the countries and eventually evolved into a permanent transboundary institution established by international agreement and involving high level officials. Similarly, the Balkan countries and others have cooperated around protected areas, sometimes driven bottom-up and sometimes top-down (Walters 2015; Westrik 2015).

Notwithstanding the concerns about so-called “water wars,” countries usually cooperate around water (Wolf, Yoffe, and Giordano 2003). This tendency toward cooperation extends to post-conflict situations. Following the violent dissolution of Yugoslavia, the first substantial cooperative effort among the former Yugoslav republics was the negotiation and entry into force of a convention and protocol governing the Sava River, which had flowed entirely within Yugoslavia but now traversed Slovenia, Croatia, Bosnia and Herzegovina, and Serbia (Čolakhodžić et al. 2014). Cooperation around water can also be used as a means of confidence building toward peace, as in the Jordan River (Mehyar et al. 2014; Haddadin 2014), or to prevent conflict, as in the Caucasus (Vardanyan and Volk 2014).

Transboundary environmental assessments can also help preempt and resolve transboundary issues related to shared natural resources and the environment. For example, in Central Asia, the Environment and Security Initiative (ENVSEC) supported a transboundary environmental assessment on a proposed copper-gold mine operation in Kyrgyzstan, 2.5 km south of the Kyrgyz-Kazakh border and close to a transboundary river (Nordström 2016*). The assessment identified potential environmental issues and ways to mitigate them before they escalated into conflict. As a result of the project, Kyrgyzstan amended its laws on environmental protection to require clearer procedures and additional public participation.

Generating political will for reform

Development and implementation of effective governance structures is impossible without political will. In Cambodia, the post-conflict government passed sweeping land law reforms in 1992 (Williams 2013b). However, the government lacked sufficient political will to implement these reforms. Corruption and incompetence in the administration of the land registry program led to failure of the program

1006 Governance, natural resources, and post-conflict peacebuilding

and widespread loss of faith in the government that had administered it. Three years later, a new land registration system was created, this time the result of new political will on the part of the Cambodian government, with greater success than its predecessor, albeit still with implementation problems (Nichols and Al Moumin 2016*; Williams 2013b).

The need for political will at all levels is obvious; the more difficult question is what to do when it is lacking. Generating political will is a daunting proposition, particularly in countries with a history of corruption and bad governance from community institutions to the highest levels of government. It can be particularly difficult to generate political will for reform in the natural resource sector; oil, gas, and other high-value resources often provide significant sources of revenue for political elites which they are reluctant to give up, while other resources may seem less important and can be excluded from the reform agenda.

International transparency efforts such as EITI can help to generate political will. Where international funding and investment is contingent upon being in good standing with EITI (or the Kimberley Process or Dodd-Frank), being deemed to be in noncompliance can quickly build political will needed to implement reforms to achieve compliance.

In generating political will, as in all aspects of post-conflict peacebuilding, appropriate tools and mechanisms must be tailored to the specific situation. Different mechanisms can be used to manage the incentives of high level politicians and officials, improve awareness and political efficacy among the population, and persuade decision makers and the public of the importance of natural resource sector reform. These can include transparent data and information generation and dissemination, and accountability mechanisms designed to put pressure on decision makers, both bottom up and top down.

Information can be a powerful tool in building political willingness to address natural resource issues, even in the face of other competing peacebuilding priorities. Accurate information about the economic and social importance of natural resources, the distribution of natural resource revenues and benefits across society, and the threats to their continued sustainable utilization can help place natural resources on the national political agenda. In Rwanda, the UNEP/UNDP Poverty and Environment Initiative (PEI) conducted extensive studies and analyses to calculate the economic cost of environmental degradation (Wrist Sorensen 2016*). It found that soil erosion related to deforestation was leading to a 2 percent decrease in the GDP; that 41 percent of the GDP and 72 percent of exports were tied to the agricultural sector and in danger from erosion, over-cultivation, and flooding; and that degradation of wetlands was linked to loss of water levels in lakes causing the cost of electricity to double. These findings convinced the government to include natural resources in the national poverty reduction strategy, and they were also credited with contributing to Rwanda's strong natural resource governance regime and the passage of key environmental framework laws and strategy documents. Rwanda's focus on natural resource governance supported its economic growth and recovery, and Rwanda

is now one of Africa's top performers in terms of economic growth and poverty reduction—less than fifteen years after the end of the conflict (Brooke and Matthew 2016*).

Environmental information can also help address problems of corruption and overexploitation by raising awareness about the equitable distribution of benefits and ultimate cost of such exploitation to both the public and the elites themselves. This can help leverage public pressure to manage over-exploitation and adjust the incentives of exploiters to share and maximize profits over time through a more sustainable model.

In cases of intentional malfeasance and corruption, information alone is not usually sufficient to generate sufficient will for effective governance reform. In the DRC, internationally supported governance reform projects failed to address the interests of political elites in rents from renegotiation of mining concessions and profits from over-exploitation of mineral resources by state-owned companies (Garrett 2016*). As long as political elites were seeking rents successfully, they had no interest in governance reform which might upset their revenue stream (even if some Congolese were interested in the reforms), resulting in political obstructionism and the consequent failure of legislative reforms in the mining sector. Effective reform in these circumstances requires building political will among elites by changing short-term and long-term incentives so that they believe reform is in their interest. External political and economic pressure can be instrumental in shaping these incentive structures.

In many post-conflict situations, rent seeking is related to political and economic instability. Where the future is uncertain, elites at all levels may have incentives to make as much money as they can, while they can, rather than investing in sustainable practices which will bring benefits in the long term. Both corruption and over-exploitation of natural resources promise substantial short-term gains (often with personal benefits) at the expense of long-term economic and political security (Weinthal and Luong 2006; Rose-Ackerman 1999). This situation is exacerbated as elites seek to maximize profits from natural resources and are focused on election cycles. This creates a circular situation in which instability is both a cause and a result of bad governance, and political will for reform is essentially nonexistent.

Breaking this circle can require pressure from the population, from the international community, and—often—both. Bottom-up pressure can be facilitated by accountability measures, and particularly transparency, which inform the public about the actions of elites and provide them with mechanisms to affect those actions.³⁰ Restoring internal political accountability can be difficult following conflict, where power has often become associated with the exercise of martial force rather than public support and political processes. Natural resources can play a key role in this dynamic, as resource revenues can replace taxation as

³⁰ See the discussion on rule of law, above.

1008 Governance, natural resources, and post-conflict peacebuilding

primary source of the government budget, delinking government wealth from popular welfare.

The international community can play a significant role in building political will, through economic sanctions and supply chain mechanisms.³¹ Such measures can put pressure on economic, political, and military elites to develop and implement meaningful reforms or risk losing enormously valuable investments and access to international markets.

NATURAL RESOURCE GOVERNANCE IN THE TRANSITION: PEACEKEEPING, SANCTIONS, ADMINISTRATION, JUSTICE, AND RETURN

State capacity and authority are often severely diminished in during conflict. The physical, informational, and human infrastructure for governance, economic growth, and delivery of services is degraded. This situation may be further complicated where, as in Afghanistan, large portions of the country are beyond the control of the central government and its partners (Nichols and Al Moumin 2016*). Even where physical control is possible, the exercise of authority over a particular issue, region, or resource may be contested. In post-conflict Liberia, for example, indigenous Liberians widely rejected the authority of Liberian courts to resolve land disputes because of a perceived judicial bias toward Americo-Liberians (Meinzen-Dick and Pradhan 2016*).

While the ultimate goal is the permanent restoration of effective governmental authority, it can take time to develop and implement new government structures. During the interim, additional mechanisms and support may be necessary to maintain security, meet human needs, establish accountability, and facilitate the transition to peace. These include (1) peacekeeping missions, (2) sanctions, (3) transitional administration arrangements, (4) transitional justice and compensation mechanisms, and (5) programs to facilitate the return of internally displaced persons and refugees.

Peacekeeping missions

One of the most important priorities in the immediate post-conflict period is consolidating and keeping the peace. This includes such tasks as separating opposing forces; demobilizing, disarming, and reintegrating excombatants; security sector reform; monitoring ceasefires; and restoring basic civil order. In Africa alone, the UN has expended US\$32 billion on thirteen UN peacekeeping operations in nine countries to respond to conflicts in which natural resource-related disputes were a contributing cause or conflicts that were financed in part by natural resource revenues (UNEP 2012). Third-party peacekeeping operations

³¹ See the discussions on accountability, Kimberley Process, and the Dodd-Frank Act, above.

like the UN “Blue Helmets” play an important role in stabilizing post-conflict countries, restoring governmental authority over natural resources, preventing illegal natural resource exploitation, demilitarizing and securing resource-rich areas, monitoring compliance with the peace agreement, and providing initial technical assistance to rebuild governance structures. Peacekeeping missions also have a significant resource footprint or “environmental footprint”, which can create tensions with host communities (Waleij et al. 2016*).³² Moreover, peacekeepers are increasingly recognizing the linkages between natural resource governance and security objectives, as illustrated by the two-year collaborative process between UNEP, the UN Department of Peacekeeping Operations (DPKO), and the UN Department of Field Support (DFS) in developing their flagship report on *Greening the Blue Helmets* (UNEP 2012).

Given the linkages between natural resources and security objectives, peacekeepers could potentially play a more direct role in restoring natural resource governance following conflict. Several recent peacekeeping operations have included natural resources in some way in their mandates, including missions in Cambodia, DRC, Liberia, Sierra Leone, and South Sudan (UNEP 2012). For example, the mandate for the UN Mission in Liberia (UNMIL) specifies that the mission should “assist the transitional government in restoring proper administration of natural resources” (UNSC 2003, 4). Pursuant to this mandate, UNMIL patrolled rubber plantations, established checkpoints to address illegal logging, trained officials and police in natural resource related issues, and provided guidance on the development of natural resource policies (Taylor and Davis 2016*).

Recognizing that demand on resources to station and supply peacekeeping troops can strain already limited fuel, food, and water supplies in post-conflict areas—and affect local perceptions of peacekeeping forces—peacekeeping operations are increasingly incorporating environmental considerations into their mandates and guidelines (Ravier et al. 2016*). DPKO and DFS adopted an official environmental policy to assist peacekeepers in identifying and addressing the environmental issues associated with their activities (DPKO and DFS 2009). The policy covers subjects ranging from waste management, to the handling of hazardous substances, to water and energy conservation (Ravier et al. 2016*). Domestic militaries and regional entities such as NATO have issued similar guidelines (Waleij et al. 2016*). As it explores opportunities to improve peacekeeping, the UN has continued to note the importance of natural resources (UN 2015), and in 2015 the UN Secretary-General appointed Franz Baumann as the UN Special Adviser on Environment and Peace Operations. At the national level, several militaries increasingly focus on environmental intelligence—that is the development of environmental data to inform mission planning (Waleij et al. 2016*).

³² On the potential effects of natural resource-related crimes committed by individual peacekeepers, see Waleij (2016*).

1010 Governance, natural resources, and post-conflict peacebuilding

Peacekeepers must ensure that their involvement does not support government corruption or elite capture of resources. In DRC, for example, a peacekeeper-supported mission to retake control of mining sites from rebel groups resulted in population displacement, human rights violations, and illicit exploitation of the mining sites by government forces (Taylor and Davis 2016*).

Sanctions

Sanctions can be an effective, if blunt, way of establishing accountability for natural resource mismanagement. The UN has issued several sets of sanctions on natural resources linked to conflict or human rights abuses, such as diamonds in Sierra Leone, timber and diamonds in Liberia, and diamonds in Angola (Taylor and Davis 2016*). Such sanctions can be hard to implement, as peacekeepers rarely have an explicit mandate to enforce sanctions and may lack expertise in tracking and monitoring natural resources. Broad sanctions can adversely affect a range of parties involved in the targeted natural resource sector, including those not involved in malfeasance; and targeted sanctions can be particularly difficult to enforce and can disproportionately affect small scale operators that lack the resources to demonstrate a clean supply chain (Taylor and Davis 2016*). In some cases, sanctions can be effective at motivating reform. For example, in Liberia, UN sanctions on timber and timber products led to a sweeping concession review and forest policy reform laws (Rochow 2016*; Waugh and Murombedzi 2016*; Altman, Nichols, and Woods 2012). Moreover, the threat of sanctions was maintained even after they were lifted, as the UN Security Council retained an expert group to periodically monitor reforms.

Sanctions can be particularly effective when tied to other international accountability processes, such as supply chain mechanisms. Established supply chain mechanisms—such as the Kimberley Process—can provide an established normative and institutional framework that can guide the country regarding necessary measures to put in place an effective regime governing the natural resource that was the object of the sanctions. In the DRC, the UN Security Council imposed sanctions on designated individuals and entities involved in the conflict; mandated a group of experts to investigate; called on the Congolese government, peacekeepers, and the group of experts to exchange information on the illegal trafficking of natural resources; and called on member states to “to take measures, as they deem appropriate, to ensure that importers, processing industries and consumers of Congolese mineral products under their jurisdiction exercise due diligence on their suppliers and on the origin of the minerals they purchase” (UNSC 2008b, 4) and “ensure that importers, processing industries and consumers of Congolese mineral products under their jurisdiction exercise due diligence on their suppliers and on the origin of the minerals they purchase” (UNSC 2009c, 4). The U.S. Dodd-Frank Act and draft EU regulations, discussed above, require companies disclose what measures they have taken to exercise due diligence on the chain of custody of minerals originating in the DRC or adjoining countries.

Transitional administrations

Where a post-conflict country lacks capacity to manage its own natural resources effectively and responsibly, the government may request assistance from the international community in assuming or sharing certain governance responsibilities on a temporary basis. In truly exceptional circumstances—as in Kosovo, Timor-Leste, and Iraq—transitional administration may be imposed under chapter VII of the UN Charter, without the request of the host government (Lim 2006).

In transitional administration arrangements, an international entity such as a foreign government, UN body, or development bank may share certain sovereign functions—including maintenance of security, prosecution of criminals, or procurement—of the post-conflict country in the form of a transitional administration or other shared sovereignty mechanism (Lim 2006). Though such intrusion contravenes a basic understanding of the sovereign rights and responsibilities of statehood, it has been justified by the danger that a weak and unstable country poses to international peace.

Transitional administrations are established—usually at the request of a host government—after conflict to fulfill basic governance functions while training and preparing to elect a new national government. National actors should be involved in every aspect of governance during the transitional administration. This not only helps prepare them to run the new government on their own, it also ensures that the government taking shape is appropriate to and owned by the population (Hohe 2003). To this end, it is important to engage different and representative stakeholders, and not only a privileged group.

The United Nations Transitional Administration in East Timor (UNTAET) illustrates some of the challenges that face a transitional administration. UNTAET was established in 1999 by UN Security Council Resolution 1272 to maintain security, meet basic humanitarian needs, lay the groundwork for sustainable economic development, and build governance capacity in newly independent Timor-Leste (UNSC 1999). One of the key natural resource issues addressed by UNTAET was land administration and land conflict resolution (Brown 2001). The UNTAET administration fulfilled its security and humanitarian functions, but failed to adequately engage national stakeholders, particularly communities outside the capital city, leading to accusations of imperialism (Benzing 2005). In 2002, UNTAET turned over control of the country to the Constituent Assembly of Independent Timor-Leste. The new government was unable to maintain political stability on its own, and in 2006, faced with the possibility of state failure, the UN Security Council created the United Nations Integrated Mission in Timor-Leste (UNMIT) to reinforce governance, maintain security, and continue to build capacity of the national government (UNSC 2006). For the next six years, UNMIT remained deeply involved in the country's daily affairs (Butler 2012).

More often, transitional administrations are internally driven and internationally supported—as in Liberia—with the structure and powers set forth in a peace

1012 Governance, natural resources, and post-conflict peacebuilding

agreement. Such transitional administrations tend to operate from the peace agreement to the next national elections.

Immediately following conflict, natural resources are vulnerable to over-exploitation and mismanagement—and this is particularly the case in countries with governance capacity that is so diminished that they need transitional administrations. Transitional administrations often struggle with corruption: not only may corruption persist from during and before the conflict, but there can be incentives for corruption during transitional administrations that are largely domestic, as officials in transitional administrations may be barred from running in national elections.

Given the importance of natural resource governance to post-conflict peacebuilding, transitional administrations need to take specific measures to address natural resources—and to be careful about what they do and how they do it. Because transitional administrations are not elected, they do not have a mandate to undertake land reform, grant substantial mining and timber concessions, or overhaul legislation governing water rights. Transitional administrations can, and should, do many things. Where there were widespread irregularities with natural resource concessions, they can commission independent concession reviews, as in Liberia (Rochow 2016*). They should facilitate the return of displaced persons, and can provide services to mediate disputes over land ownership and access (Unruh and Williams 2013). Where land reform is necessary, they can start a consultative process, with the anticipated reforms taking place once a government has been elected.

Significantly, in rural areas of many post-conflict countries, local and customary authorities have the primary responsibility for governing land, community forests, grazing lands, and many other renewable natural resources. This may be by law in a federal or decentralized country, or it may be due to the inability of transitional administrations to project their regulatory authority outside of urban centers. In such circumstances, transitional administrations can engage with local and customary institutions to develop effective frameworks for sustainable natural resource governance.³³

Sector-specific arrangements can help improve natural resource governance. In sector-specific arrangements, an international entity provides support and assistance conditional on retaining some measure of control or oversight over the natural resource in question. In the late 1990s, Chad entered into an arrangement with the World Bank and an international petroleum consortium under which Chad agreed to international oversight of its use of certain petroleum revenues in exchange for funding for construction of a 1,000-km pipeline. However, the accountability mechanisms put in place under the arrangement lacked sufficient power to effectively check the corrupt national government. Once construction of the pipeline was underway, Chad's president rechanneled oil funds to purchase

³³ See discussion on legal pluralism, above.

weapons and enrich his supporters, unilaterally forcing renegotiation of the arrangement (Winters and Gould 2012).

Under the Governance and Economic Management Assistance Program (GEMAP) in Liberia, the World Bank and other international donors took a more direct role in the administration of natural resources, and governance more broadly. Created in 2005, GEMAP placed international experts directly in the financial offices of Liberian government institutions. Procurements and other government expenditures required signatures from both the usual government official and an international expert, giving international experts effective veto power over certain expenditures (Dwan and Bailey 2006; Daase 2011). The program also included a complete review of contracts and concessions entered into by the Liberian National Transitional Government. The review team recommended cancellation or renegotiation of fifty contracts, including five petroleum contracts, one rubber concession, and one iron ore concession (Rochow 2016*).

In shared sovereignty arrangements it can be difficult to determine the appropriate amount of international involvement. Too little involvement can render international oversight ineffective. Conversely, too much involvement can impede development of national ownership and capacity (Hohe 2003). Ultimately, shared sovereignty and other transitional administration arrangements, like other peace-building mechanisms, cannot function without adequate national political will.

Transitional justice and compensation

Natural resources are often linked to human rights abuses, war crimes, and other crimes (Vialle et al. 2016*). Following conflict, the legacy of these crimes can undermine government legitimacy and impede economic and social recovery. Crimes undertaken in pursuance of natural resource wealth can leave large portions of the population displaced or dispossessed of property or resource rights, or afflicted with permanent physical or psychological injury. Direct damage to natural resources and the environment can severely limit the resource base and pose a threat to human health and safety.

These crimes—and others committed during armed conflict—must be investigated, victims compensated, and environmental damage repaired so that society can move on and rebuild following conflict. Transitional justice mechanisms such as tribunals and truth and reconciliation commissions are important tools to bring war criminals to justice and prevent them from returning to power, restore trust in the justice system, and rebuild lives and livelihoods (Teitel 2000; Roht-Arriaza and Mariezcurrena 2006). They can also generate information about the linkages between natural resources and criminal activity in order to inform peacekeeping and prevent future abuses. Imposing accountability on war criminals can also serve a symbolic function, easing reconciliation and paving the way for peace (Philpott 2012).

Historically natural resources have not often been directly addressed in transitional justice or compensation mechanisms (Harwell 2016*). There are

1014 Governance, natural resources, and post-conflict peacebuilding

a number of reasons for this. Such mechanisms have limited resources, and have prioritized crimes such as genocide and hate crimes. Economic crimes and corruption linked to natural resources may be culturally viewed as inevitable and therefore not worth prosecuting. Moreover, it can be harder to gather evidence in cases related to natural resources. Evidence of damage to or illicit exploitation of natural resources may be located at sites distant from the tribunal's location. Witnesses to natural resource-related crimes may be unreliable due to pervasive corruption throughout the sector. Environment-related damage can be slow to manifest and causation difficult to prove (Payne 2016*). Determining appropriate compensation for environmental damage can be difficult, as such damage may be hard to measure and define. Because of the rarity of natural resource-related cases, prosecutors and tribunals may lack experience and precedent in dealing with natural resource related crimes, making them still harder to prosecute (Radics and Bruch forthcoming).

Notwithstanding these challenges, there is a growing recognition of the importance of natural resources both during and after conflict, and tribunals and other transitional justice regimes have addressed natural resource-related crimes under other both international and national legal frameworks, such as money laundering and racketeering laws, human rights law, international criminal law, and the law of war. For example, the Special Court for Sierra Leone prosecuted and convicted the leadership of the Revolutionary United Front for abduction, physical violence, use of child soldiers, forced labor, and looting for their actions in taking control of and exploiting mineral resources during Sierra Leone's civil war (Harwell 2016*).³⁴

In cases where environmental pollution or degradation poses a threat to human health, environmental clean-up is both urgent and expensive, while assessing and collecting compensation may take time. Following the 1990–1991 Gulf War, the UN Security Council attempted to address this problem through the creation of the United Nations Compensation Commission (UNCC) to compensate governments, entities, and individuals for damage caused by Iraq's invasion of Kuwait, including environmental damage (Payne 2016*; de Silva 2016*). In total, the UNCC awarded US\$5.3 billion in compensation for environmental damage, to be paid from the Compensation Fund which collects a fixed percentage of Iraq's oil revenues. To facilitate fast response to urgent cleanup needs, the UNCC prioritized monitoring and assessment claims to help quickly determine cleanup priorities. The UNCC also awarded US\$8.4 million to cover the costs of countries that had responded to the emergency, an important precedent for incentivizing future international aid (Payne 2016*). Finally, the UNCC established and supervised a follow-up program to oversee use of award funds for environmental remediation and help build capacity in the region. As the UNCC developed its modalities and started evaluating claims, it increasingly worked

³⁴ For a review of prosecutions by foreign courts for trading in conflict resources, in contravention of UN Security Council resolutions, see Vialle et al. (2016*).

with Iraq by providing legal and technical aid and access to monitoring and assessment results. This cooperation helped foster a sense of fairness and justice on all sides (de Silva 2016*).

Return of IDPs and refugees

The indiscriminate violence, targeted persecution, and other conditions associated with armed conflict usually causes large numbers of refugees and IDPs to flee their land and their communities. Even if combatants are not intentionally targeting people in a community, they may force people to relocate in order to claim their land or the natural resources on or under the land—or to remove noncombatants from the field of battle. When the fighting ends, displaced persons may face obstacles to returning to their homes and reclaiming their property, including people who have occupied the land since their departure, political interests that resist certain groups from returning to particular areas (especially in conflicts with ethnic or genocidal dimensions), and changed circumstances that accompany conflict. In Afghanistan, disputants over land secured falsified documents from corrupt officials to bolster their claims (Gompelman 2011). In Chocó, Colombia, oil palm plantation owners set up operations with government backing after Afro-Colombians fled their communities, leading to violent conflict when the original displaced inhabitants tried to return (Klein and Joras 2016*).

Returnees may find the post-conflict society different than the one they left. In post-conflict Bosnia and Herzegovina, return occurred in the dual context of a transition from socialism to capitalism and a rapid process of urbanization that left many rural IDPs disinclined to return to old homes and farms (Williams 2013a). While there is generally a strong preference for return rather than compensation (UN 2005; McCallin 2013), return may even be undesirable when pre-conflict land allocation reflected serious inequities that may have contributed to the outbreak of conflict in the first place (Elhawary and Pantuliano 2013). Poorly designed programs to facilitate return can also reinforce long-standing disparities in land rights, as in the case of a program to provide building materials to Afghan returnees that only assists landowners, but not tenant farmers who were displaced.

The case of post-conflict Bosnia and Herzegovina illustrates some of the dynamics involved when political interests oppose the return of displaced persons (Williams 2013a). The Bosnian war displaced people along ethnic lines, essentially segregating what had been a multi-ethnic society. The Office of the High Representative (OHR), which was given a great deal of power by the peace agreement that ended the war, preferred a return to pre-war demographic patterns, while the political leaders in the newly established Federation of Bosnia and Herzegovina and the Republika Srpska sought to maintain the ethnic distribution generated by the conflict. Early in the post-conflict process, these leaders attempted to cancel rights to property possessed by displaced persons by exploiting absence limits and instituting steep bureaucratic requirements (Williams 2013a).

1016 Governance, natural resources, and post-conflict peacebuilding

The OHR eventually prevented the most egregious abuses, but the attempted exploitation of such loopholes demonstrates the potential political obstacles to return. In some cases, international oversight and intervention may be necessary until the post-conflict transition to peace has been consolidated.

In 2005, the UN Sub-Commission on the Protection and Promotion of Human Rights adopted the Principles on Housing and Property Restitution for Refugees and Displaced Persons, also known as the Pinheiro Principles (UN 2005). The Pinheiro Principles lay out a comprehensive set of standards for return and restitution predicated on equity and the general principle that the direct return of lost property and housing should be pursued wherever possible. They also include practical guidance for moving through the return and restitution process. Neither political constraints nor the passage of time are considered sufficient reason for failing to restore property, and monetary or in-kind compensation is a valid approach only when restoration is either physically impossible or when compensation is preferred by the displaced party.

Where returning displaced persons to their original habitation is not possible or desirable, they must be compensated. This is often a significant challenge because the people most often displaced by conflict are agrarian rural dwellers who require land that can support their livelihood (Unruh and Williams 2013). Fertile land for use as compensation is generally in short supply following conflict, whether because there was little available to begin with (perhaps contributing to the cause of conflict), or because multiple parties have laid claim to the same land historically and over the course of the fighting. Additionally, the number of claims and disputes that must be resolved can be staggering and may threaten to overwhelm the court system and delay resolution of claims and disputes. Mozambique was able to address both of these challenges following its conflict. To free up land for use in awarding compensation, the government required resubmission of previously made land applications, and after several extensions of the window for renewing claims and notice provided through individual letters and over the radio, it cancelled all remaining land titles and claims. This liberated more than three million hectares of agriculturally productive land in the Zambezi Province alone (Norfolk and Liversage 2003). The required resubmission process also resulted in thousands of cancelled claims, easing the burden on the courts. A series of laws, decrees, and legal decisions then classified claims and disputes for easier handling and categorically dismissed cases brought by returning Portuguese colonists, claims based on bad-faith transactions, and disputes brought by former occupants that had fled during the war (Unruh and Williams 2013).

PROGRAMMING AROUND GOVERNANCE AND NATURAL RESOURCES

This chapter now shifts attention from consideration of objectives and approaches for improving governance of natural resources following conflict to questions about how to design, implement, and evaluate programming around governance

and natural resources. It starts with a discussion of mainstreaming natural resource governance into humanitarian and development programming (which often happens during armed conflict, shapes post-conflict peacebuilding, and continues in in the post-conflict process). It then examines approaches for mainstreaming natural resource governance into post-conflict programming, focusing on considerations of prioritization and sequencing. The section concludes with discussions of mobilizing international and domestic financing for programming around governance and natural resources, and coordinating among agencies.

Mainstreaming natural resource governance into humanitarian and development programming

The conditions for successful governance in the wake of conflict are often shaped by operational, programming, and policy decisions made by peacekeepers, negotiators, humanitarian agencies, businesses, and NGOs. From establishing security to delivering humanitarian assistance to rebuilding infrastructure, the urgent necessity of short-term actions to help bring peace and alleviate suffering must be tempered by an awareness of the potential long-term impacts of those actions—on the management of natural resources critical to livelihoods and the economy, the prospects for economic recovery, the rule of law, the potential for corruption and future conflict, and, ultimately, the stability of the peace. Given the diverse and substantial roles of natural resources in most post-conflict countries, consideration of those resources and their management should be a key part of these decisions.

Increasingly, humanitarian and development agencies take into account the environment in their programming decisions during post-conflict response, in both short-term and long-term interventions. Consideration of the environment in long-term planning tends to focus on both (1) reducing the environmental footprint of operations and (2) keeping natural resource shortages and competition from rekindling old conflicts (Jarvie 2016*). In addition, post-conflict reconstruction efforts need to address environmental and livelihood concerns in a way to accommodate displaced people's needs for basic resources while providing alternatives that do not cause environmental degradation (Bromwich 2008); these efforts often start while conflict is ongoing as a way of preparing for peace (Buchanan-Smith and Bromwich 2016*). Humanitarian programming that takes environmental vulnerability into account, including climate change that adversely impact and aggravate poor natural resource management, is becoming more mainstream (Jarvie 2016*; Matthew and Hammill 2012). This evolution encourages interagency cooperation, evidenced by the Emergency Capacity Building Project, a consortium of six international humanitarian and development agencies that integrated knowledge bases of climate change adaptation and disaster risk reduction to good use from 2004 to 2013 (ECB Project n.d.).

Drawing upon experience working with many humanitarian and development organizations, Judy Oglethorpe and her colleagues have highlighted a series of

1018 Governance, natural resources, and post-conflict peacebuilding

practical contexts in which humanitarian and development programming have mainstreamed—and should mainstream—consideration of natural resources: (1) promoting sound governance, institution building, and capacity strengthening to minimize risks of resource exploitation for short-term gain; (2) restoring livelihoods based on sound natural resource and environmental management; (3) planning within the capacity of the land and natural resource base; (4) maximizing opportunities for sound policy reform based on environmental sustainability; (5) collaborating across sectors; and (6) planning for post-conflict natural resource funding (Oglethorpe et al. 2016*).

One of the most serious and expansive humanitarian issues facing post-conflict societies is displacement. In 2015, 13.9 million people were newly displaced by conflict or persecution, bringing the total global number of internally displaced persons (IDPs) and refugees to 59.5 million—the highest ever recorded (UNHCR 2015). The growing IDP and refugee crisis is linked to natural resources in a few ways. In Darfur, Sudan and in the DRC, for instance, massive flows of IDPs led to the rapid growth of densely populated refugee camps that placed new and unprecedented demands on water and forest resources, resulting in the rapid depletion of critical resources over large areas (Jarvie 2016*; Buchanan-Smith and Bromwich 2016*). In Darfur, the IDP camps now rival the largest urban areas in Sudan in terms of population and are likely to become permanent, despite uncertainties over the future resource base to sustain them. By 2008, UNEP had already classified twenty-three camps in the Darfur region as in danger of running out of water; by 2013, at least one of these camps had run dry (UNEP 2013b). Sprawling IDP and refugee camps place enormous strains on local water, wood, and other natural resources, creating environmental and humanitarian challenges and generating tensions with host communities. Effective natural resource governance depends on resolving these pressures.

The experience of humanitarian organizations in the refugee camps of North Kivu, DRC illustrates the importance of recognizing the multiple linkages between humanitarian goals and natural resource governance (Jarvie 2016*). The province is home to almost one million displaced persons, many of whom have been accommodated in sprawling camps on the borders of the Virunga National Park, home to the endangered mountain gorilla and one of Africa's most important conservation sites. Demand for fuel wood vastly exceeds local supply, leading many IDPs to venture into the park in search of wood. This practice threatens not only the park and its wildlife, but also the long-term economic prospects of the region through lost forest resources and reduced tourism potential.

The intrusions into the Virunga National Park were driven by basic human needs, which had to be met before it would be feasible to govern the park, gorillas, or other biodiversity for their conservation, livelihood, and regional economic values. In short, it was necessary to address the immediate humanitarian needs so that longer-term natural resource governance could be pursued. Already risking sexual assault and abduction to collect fuel wood, IDPs would have been unlikely to respond to logging bans or increased enforcement measures within the park.

Recognizing this, the World Wildlife Fund (WWF) partnered with Mercy Corps, a humanitarian and development agency, to address the fuel needs at the root of deforestation. The organizations distributed fuel-efficient stoves, and organized tree plantings in an effort to reduce pressures on timber resources. The project's success can be traced to the decision by Mercy Corps and WWF to integrate both conservation and humanitarian goals into their objectives (Jarvie 2016*). The North Kivu forestry project is a good example of the benefits of inter-sectoral collaboration and coordination, drawing on the comparative strengths and areas of expertise of two organizations with different missions but a shared end goal.

In other cases, improving natural resource governance is a prerequisite to meeting essential humanitarian and development goals. In Afghanistan, war, deforestation, overgrazing, and unsustainable agriculture have led to massive land degradation, threatening the livelihoods of the primarily agrarian population (UNCTA 2013). In an attempt to mitigate the spreading poverty, the Wildlife Conservation Society created an initiative to strengthen natural resource governance at the community level through developing bylaws, training officials, facilitating institution building, helping define protected areas, and strengthening links between local institutions and the central government (Zahler et al. 2016*). One such project resulted in the declaration of Afghanistan's first officially recognized national park—Band-e-Amir—which now attracts both donor funding and tourist revenue to the region.

Addressing the linkages between natural resource governance and humanitarian and development issues is essential to meeting basic human needs and establishing sustainable economic and political structures following conflict. This requires mainstreaming natural resource governance within humanitarian and development programming. However, humanitarian and development actors may be reluctant to take on natural resource governance issues, viewing them as outside their mission. In the case of Mercy Corps, an international humanitarian and development agency, senior leaders first recognized the relationship between natural resource management and their core humanitarian and development goals, but faced the problem of building consensus within the organization (Jarvie 2016*). To preempt opposition, they conducted and then distributed an internal survey of operations, which showed that natural resource management was already a factor in programming decisions, one that was currently discussed in terms of livelihoods, income, health, and other guises. They were then able to frame the mainstreaming of natural resource management not as introducing new goals, but as making existing issues explicit in order to facilitate their work.

Prioritization and sequencing

Peacebuilding actors are often under tremendous pressure from both within and outside the country to deliver rapid and concrete results: to build roads, restore power, train police, and generate revenues for the government. Even as they seek stability and peace, peacebuilding actors struggle to meet the basic and urgent

1020 Governance, natural resources, and post-conflict peacebuilding

needs of a desperate, often displaced populace. As the case studies in this book illustrate, natural resource governance is integral to successfully and sustainably meeting the needs of post-conflict populations. Properly prioritizing and mainstreaming natural resource governance within the larger context of post-conflict issues is critical to long-term peacebuilding success.

The immediate post-conflict period is a time of extremely high expectations by both domestic populations and the international community. Foreign aid is usually highest during the first three years following a conflict, and actors helping the country stabilize and recover from conflict may feel pressure to achieve quick wins or peace dividends through projects like schools, hospitals, and road construction that yield immediate and tangible results (Large 2005). It is important, however, to keep in mind longer-term goals, such as building the capacity of government and civil society institutions and developing sustainable livelihoods, even during this period. If longer-term goals are sacrificed in the pursuit of short-term gains, it may risk the entrenchment of corruption, the loss of foreign aid, and the renewal of conflict (Large 2005; Mason, Sguaitamatti, and Gröbli 2016*; Webersik and Levy 2016*).

Even with this longer-term perspective, however, the number and variety of natural resources within any country is vast—including, for example, oil, diamonds, land, water, forests, fisheries, and ivory—and real and difficult decisions must be made about which resources and linkages to prioritize. In some cases, exemplified by Mercy Corps' experience in the DRC, integrating natural resource perspectives can increase human security and physical welfare, open new income streams, and potentially contribute to broader national and global goals, such as mitigating climate change (Jarvie 2016*). In others, multiple peacebuilding objectives revolve around the effective management of a specific resource, such as timber in Liberia, land in Nepal, diamonds in Sierra Leone, or oil in Sudan, such that addressing them can yield substantial peace dividends.

One approach to progressively rebuilding post-conflict economies and progressively extending state authority is by focusing energies in critical geographies, using growth poles, resource corridors, and pockets of stability (Maconachie, Srinivasan, and Menzies 2015; Bridge 2008). Growth poles may be geographic, sectoral, or both (Perroux 1955; Penouil 1972). In practice, such approaches often seek to invest revenues from extractive industries, technology industries, or other high-value industries to develop infrastructure and a diversified economy locally, and then expand from those poles or corridors (Fanthrope and Gabelle 2013; World Bank 2014). Questions have been raised, however, whether such an approach risks “exacerbate[ing] ... the enclave tendencies of mining projects” (Maconachie, Srinivasan, and Menzies 2015). Moreover, focusing on particular areas and not assisting other areas risks aggravating existing grievances or generating new grievances (Coyle et al. 2014).

While no single case study provides a comprehensive guide to making those decisions, the examples and analyses in this book, taken together, identify an array of factors that affect whether and how highly to prioritize governance of

Table 1. Factors in prioritizing post-conflict natural resource governance issues

		<i>Characteristic of natural resource</i>				<i>Natural resource linkage to ...</i>			
<i>International trade</i>	<i>Economic value^a</i>	<i>Lootability</i>	<i>Type and status</i>	<i>Subsistence value</i>	<i>Ecological/cultural value</i>	<i>Conflict</i>	<i>Peace process</i>	<i>Identity-based or geographic tensions</i>	<i>Crime and corruption</i>
primary export	very high	low investment/fast payoff	non-renewable, or slow-renewing and depleted	essential to life and health	global	focus or origin of conflict	central and unresolved	identity-based and geographic	incentive and resource for peace spoilers/pervasive corruption
extensive	high		slow-renewing and management-dependent	shelter or livelihood resource for large part of population	national	fueled conflict, extended duration	power sharing/resource allocation	geographic, not identity-based	resource for peace spoilers/large-scale corruption
moderate	moderate	moderate investment and payoff	slow renewing but abundant/fast-renewing but depleted	shelter or livelihood resource for some part of population	regional or group-based	conflict funder but not driver	revenue sharing	identity-based, not geographic	organized crime/corruption
limited	low		fast-renewing but management-dependent	other uses (e.g., medicinal)	local	unknown	management principles agreed	unknown	small or unorganized crime
none	none	high investment/slow payoff	fast-renewing and abundant	none	none	none	insignificant or resolved	none	insignificant

^a Economic value refers to the value to weight ratio.

1022 Governance, natural resources, and post-conflict peacebuilding

a particular resource. Table 1 offers a potential matrix for identifying and rapidly assessing many of those factors. The table recognizes that both the risks and potential benefits of natural resources are embedded in a larger post-conflict context. Natural resource scarcity alone is unlikely either to drive or to resolve conflict. What is important is how conservation and resource management efforts interact with other variables, including economic access, social and economic disparities (particularly between ethnic, cultural, or religious groups), corruption, and governance. Natural resource management efforts in post-conflict countries must be undertaken with an acute sensitivity to these interactions, to avoid exacerbating underlying tensions, deepening inequities, entrenching corruption, and igniting or reigniting conflict.

Managing foreign aid and mobilizing domestic revenues

Post-conflict priorities must all be addressed, often simultaneously, from the same pool of limited resources. Local financial resources may be limited or nonexistent in the immediate wake of conflict, leading to a heavy reliance (and dependence) on foreign aid. This dependence means that priorities and timelines for post-conflict peacebuilding are often driven by the diverse array of internal rules, processes, missions, and shifting political pressures within donor agencies or governments (Large 2005).

The role of international organizations and funders in this process is complex. Optimally, foreign funds and foreign advisors provide facilities and other physical resources that grant post-conflict natural resource administration an aura of stability and the capacity for effectiveness, as well as training to build a natural resource bureaucracy with management skills, resource knowledge, and professionalism. With time, the role of foreign actors diminishes, and public trust in the natural resource governance capacity of national and local authorities grows. However, foreign aid also can create dependencies and create incentives for corruption and rent seeking. Moreover, a government not dependent on its own population for funds risks being less responsive to its population.

In prioritizing, designing, and implementing post-conflict natural resource governance programs, agencies must prioritize local ownership of reform while providing sufficient international supervision to prevent abuses and embezzlement that can undermine a government's reputation (IDPS 2011). The balance is hard to strike, but not impossible. The Marshall Plan following World War II distributed foreign aid dwarfing any previous post-war reconstruction effort to fifteen post-conflict governments in Europe; it experienced only a single significant instance of corruption in four years (Machado 2007).³⁵

It is essential for donors and recipient governments to have a plan for winding down funding with the gradual replacement with domestic funding. Otherwise,

³⁵ On natural resources and the Marshall Plan, see Bruch, Wolfarth, and Michalcik (2012).

well-meaning interventions can lead to a perpetual dependence on donor support, or the inevitable withdrawal of funding can cause the collapse of the systems and institutions built during the funded program. For example, in post-war Liberia, the United States government ended support for commercial forestry once the new law was in place and a new forestry initiative began, resulting in a capacity gap (Nichols and Goldman 2011). Building capacity for continuation after donors reduce or withdraw funding should be an ongoing part of the program.

Inter-agency cooperation

Post-conflict peacebuilding is often carried out by a wide array of agencies and actors with disparate mandates: peacekeepers, humanitarian agencies, development organizations, institutions focusing on governance and rule of law, and conservation organizations; international and regional organizations, bilateral organizations, international and domestic NGOs, and national and local governments. Cooperation between agencies and across sectors can make post-conflict programming significantly more efficient, at a time when competing priorities and limited resources make efficiency particularly important (Grundel 2010). Different agencies can work together to share expertise in different sectors, as demonstrated by the cooperation between WWF and Mercy Corps in North Kivu (Jarvie 2016*). Increasingly, military and civilian organizations are cooperating in conflict-affected regions, including around natural resources (Civic 2016*). Even where they are not working together directly, organizations working in the same region must communicate to avoid duplication of efforts or working at cross purposes. In Liberia, a diverse group of international, bilateral, and domestic organizations came together to reform the forestry sector through the Liberia Forest Initiative, coordinating commercial, community, and conservation objectives (Altman, Nichols, and Woods 2012). Similarly, organizations often coordinate their interventions around water programming through periodic meetings (Coyle et al. 2014).

CONCLUSIONS

Natural resource governance is central to post-conflict peacebuilding. As noted at the beginning of this chapter, any particular country has a wide range of different resources, and they are important for different peacebuilding objectives. Moreover, due to their particular characteristics, history, and political economy, some are more important to the peacebuilding process and should be prioritized.

The first step in the governance process is thus to undertake a post-conflict environmental assessment that highlights the needs, challenges, and current governance capacities related to the particular natural resources and dynamics. This assessment will help governments, civil society, and international partners to prioritize natural resource governance interventions.

1024 Governance, natural resources, and post-conflict peacebuilding

The diversity of resources, peacebuilding priorities, and contexts means that there is no one-size-fits-all solution. Different natural resources will likely require different substantive and procedural approaches. Nevertheless, many of the overarching procedural principles are likely to be similar, including transparency, participation, and accountability.

When reviewing, revising, and implementing new laws, institutional frameworks, and practices, it is essential to adopt participatory processes. This will take more time and effort, but the results are usually more robust. Participatory processes and consultation are important to the government to rebuild legitimacy and to improve the substantive outcome, even if they believe that they have more substantive expertise than the general public. Participatory processes and consultation are important to international partners for similar reasons, but also because international institutions generally are not as familiar with the particular legal, social, economic, environmental, or political context. Where it may be anticipated that a participatory process will take a long time—for example, a consultative process associated with land reform—it is generally advisable to start as early as possible and to consider targeted legislative or regulatory modifications in the meantime (Unruh and Williams 2013).

Natural resource governance involves many actors with diverse perspectives, not just the government. As a country seeks to rebuild after conflict and transition from a state of fragility to a state of resilience, it is important to retain a sense of humility. Government officials and staff may have a mandate and technical expertise, but there are many other institutions and individuals in the country who have a mandate or expertise (formal or informal). Similarly, leadership and staff in international organizations and NGOs may not be inclined to respect or want to retain local norms and practices that do not comply with human rights standards or with international good practice. This humility may manifest substantively, for example through the use of legal pluralism or through the engagement of the private sector. Humility should also be practiced in the design, implementation, and evaluation of programs to strengthen natural resource governance.

REFERENCES

- Addison, T., and S. M. Murshed. 2001. From conflict to reconstruction: Reviving the social contract. UNU/WIDER Discussion Paper 2001/48. Helsinki, Finland: WIDER.
- AFDB (African Development Bank). 2003. Integrated environmental and social impact assessment guidelines. www.afdb.org/fileadmin/uploads/afdb/Documents/Policy-Documents/Integrated%20Environmental%20and%20Social%20Impact%20Assesment%20Guidelines.pdf.
- . 2012. *Development effectiveness review 2012: Fragile states and conflict-affected countries*. Tunis, Tunisia. www.afdb.org/fileadmin/uploads/afdb/Documents/Project-and-Operations/Development_Effectiveness_Review_2012_-_Fragile_States_and_Conflict-Affected_Countries.pdf.

- . 2015. *From fragility to resilience: Managing natural resources in fragile situations in Africa*. Abidjan, Côte d'Ivoire.
- Ajufo, B. 2015. Increased transparency: The key to an improved investment climate in Nigeria. *The Guardian News*, December 4. www.ngrguardiannews.com/2015/12/increased-transparency-the-key-to-an-improved-investment-climate-in-nigeria/.
- Ahmad, A., and C. Bruch. 2002. Maintaining mizan: Protecting biodiversity in Muslim communities in Africa. *Environmental Law Reporter* 32:10020–10037.
- Alden Wily, L. 2015. Resolving natural resource conflicts to help prevent war: A case from Afghanistan. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Altman, S. L., S. S. Nichols, and J. T. Woods. 2012. Leveraging high-value natural resources to restore the rule of law: The role of the Liberia Forest Initiative in Liberia's transition to stability. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- Aoki, C., A. Al-Lami, and S. Kugaprasatham. 2014. Environmental management of the Iraqi marshlands in the post-conflict period. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Arjoud, B., K. Westerman, and J. Edmond. 2015. Men and women as conservation partners in conflict settings. *Peace Review* 27 (2): 175–180.
- Batson, D. E. 2013. Snow leopards and cadastres: Rare sightings in post-conflict Afghanistan. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- Beierle, T. C., and J. Cayford. 2002. *Democracy in practice: Public participation in environmental decisions*. Washington, D.C.: Resources for the Future Press.
- Benzing, M. 2005. Midwifing a new state: The United Nations in East Timor. *Max Planck Yearbook of United Nations Law* 9:295–372.
- Berkes, F., P. George, and R. J. Preston. 1991. Co-management: The evolution in theory and practice of the joint administration of living resources. Paper presented at Common Property Conference, the Second Biennial Conference of the International Association for the Study of Common Property, Winnipeg, Manitoba, September 26–29.
- Besada, H. 2013. Doing business in fragile states: The private sector, natural resources and conflict in Africa. Background research paper submitted to the High Level Panel on the Post-2015 Development Agenda. www.post2015hlp.org/wp-content/uploads/2013/06/Doing-Business-in-Fragile-States-The-Private-Sector-Natural-Resources-and-Conflict-in-Africa-FINAL-May-25-2013.pdf.
- Bishop, P., and G. Davis. 2002. Mapping public participation in policy choices. *Australian Journal of Public Administration* 61 (1): 14–19.
- Blore, S., and I. Smillie. 2011. Taming the resource curse: Implementing the ICGLR certification mechanism for conflict-prone minerals. Ottawa, Canada: Partnership Africa Canada.
- Boege, V., M. A. Brown, and K. P. Clements. 2009. Hybrid political orders, not fragile states. *Peace Review: A Journal of Social Science* 21 (1): 13–21.
- Boege, V., A. Brown, K. Clements, and A. Nolan. 2008. *On hybrid political orders and emerging states: State formation in the context of 'fragility'*. Berlin: Berghof Research Center for Constructive Conflict Management. www.berghof-handbook.net/documents/publications/boege_etal_handbook.pdf.
- Boege, V., and D. M. Franks. 2012. Reopening and developing mines in post-conflict settings: the challenge of company-community relations. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.

1026 Governance, natural resources, and post-conflict peacebuilding

- Bouma, G. 2012. Challenges and opportunities for mainstreaming environmental assessment tools in post-conflict settings. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Bowling, B., and A. Zaidi. 2015. Developing capacity for natural resource management in Afghanistan: Process, challenges, and lessons learned by UNEP. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Brinkerhoff, D. 2007. *Governance in post-conflict societies: Rebuilding fragile states*. Contemporary Security Studies.
- Bromwich, B. 2008. Environmental degradation and conflict in Darfur: Implications for peace and recovery. *Humanitarian Exchange Magazine* 39:22–28.
- Brooke, R., and R. Matthew. 2016. Environmental governance in post-conflict situations: Lessons from Rwanda. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Brown, M. 2001. Land and property administration in East Timor: Summary of consultants' reports prepared by the Land and Property Administration Project. FS/TIM/OO/S01. Nairobi, Kenya: UN Habitat.
- Brown, O., M. Hauptfleisch, H. Jallow, and P. Tarr. 2012. Environmental assessment as a tool for peacebuilding and development: Initial lessons from capacity building in Sierra Leone. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Bruch, C., K. Meehan, Y. Bugaighis, and A. Egorova. n.d. Peacebuilding and power sharing in post-conflict constitutions. Unpublished manuscript on file with authors.
- Bruch, C., R. Wolfarth, and V. Michalcik. 2012. Natural resources, post-conflict reconstruction, and regional integration: Lessons from the Marshall Plan and other reconstruction efforts. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Buchanan-Smith, M., and B. Bromwich. 2016. Preparing for peace: An analysis of Darfur, Sudan. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Burt, M., and B. J. Keiru. 2014. Community water management: Experiences from the Democratic Republic of the Congo, Afghanistan, and Liberia. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Butler, M. J. 2012. Ten years after: (Re)Assessing neo-trusteeship and UN state-building in Timor-Leste. *International Studies Perspectives* 13:85–104.
- Cain, A. 2014. Conflict and collaboration for water resources in Angola's post-war cities. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Call, C. T., and E. M. Cousens. 2008. Ending wars and building peace: International responses to war-torn societies. *International Studies Perspectives* 9:1–21.
- Carbonnier, G., and A. Wennmann. 2013. Natural resource governance and hybrid political orders. In *Routledge handbook of international statebuilding*, ed. D. Chandler and T. D. Sisk. London: Routledge.
- Carius, A., and A. Maas. 2012. Thinking back-end: Improving post-conflict analysis through consulting, adapting to change, and scenario building. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.

- Carlsson, L., and F. Berkes. 2005. Co-management: concepts and methodological implications. *Journal of Environmental Management* 75 (1): 65–76.
- Castro, L. J., and A. M. Stork. 2015. Linking to peace: Using BioTrade for biodiversity conservation and peacebuilding in Colombia. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Cheng, C., and D. Zaum. 2016. Corruption and the role of natural resources in post-conflict transitions. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Civic, M. A. 2016. An enabling framework for civilian–military coordination and cooperation in peacebuilding and natural resource management: Challenges and incremental progress. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Claps, M. 2008. Public sector transparency: How is it regulated in Europe? In *Governance, risk, and compliance handbook: Technology, finance, environmental, and international guidance and best practices*, ed. A. Tarantino. Hoboken, NJ: John Wiley & Sons.
- Coglianesi, C., H. Kilmartin, and E. Mendelson. 2008. *Transparency and public participation in the rulemaking process: A nonpartisan presidential transition task force report*. Philadelphia, PA: University of Pennsylvania Law School.
- Čolakhodžič, A., M. Filipovič, J. Kovandžič, and S. Stec. 2014. The Sava River: Transitioning to peace in the former Yugoslavia. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Collier, P., and A. Hoeffler. 2012. High-value natural resources, development, and conflict: Channels of causation. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- Conca, K., and J. Wallace. 2012. Environment and peacebuilding in war-torn societies: Lessons from the UN Environment Programme’s experience with post-conflict assessment. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Conroy, M. J., and J. T. Peterson. 2013. *Decision making in natural resource management: A structured, adaptive approach*. Chichester, UK: John Wiley & Sons.
- Coyle, I., C. Bruch, D. Jensen, A. Crawford, and A. Harris. 2014. Natural resource programming in post-conflict situations. Environmental Peacebuilding Policy Brief No. 8. Washington, D.C.: Environmental Law Institute and United Nations Environment Programme.
- Daase, C. 2011. Liberia’s Governance and Economic Management Assistance Programme—A new model of shared sovereignty? *Zeitschrift für ausländisches öffentliches Recht und Völkerrecht* 71 (3): 493–521.
- Dabelko, G. D., and W. Rogers. 2016. Military-to-military cooperation on the environment and natural disasters: Engagement for peacebuilding. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Davis, C., L. Williams, S. Lupberger, and F. Daviet. 2013. *Assessing forest governance: The Governance of Forests Initiative Indicator Framework*. Washington, D.C.: World Resources Institute. www.wri.org/publication/assessing-forest-governance.
- Dawes, M. A. 2016. Considerations for determining when to include natural resources in peace agreements ending internal armed conflicts. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.

1028 Governance, natural resources, and post-conflict peacebuilding

- de Leon, R., T. Garcia, G. Kummel, L. Munden, S. Murday, and L. Pradela. 2013. *A data-driven examination of land tenure risk and industrial concessions in emerging market economies*. Washington, D.C.: Rights and Resources Initiative and the Munden Project. www.rightsandresources.org/documents/files/doc_6301.pdf.
- Deng, D. K., P. Mertenskoetter, and L. van de Vondervoort. 2013. Establishing a mining sector in postwar South Sudan. USIP Special Report No. 330. Washington, D.C.: United States Institute of Peace. www.usip.org/sites/default/files/SR330-Establishing%20a%20Mining%20Sector%20in%20Postwar%20South%20Sudan.pdf.
- de Silva, L. 2016. Reflections on the United Nations Compensation Commission experience. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- DPKO (Department of Peacekeeping Operations, United Nations) and DFS (United Nations Department of Field Support). 2009. Environmental policy for UN field missions. New York.
- Dumas, J. 2016. Preventing violence over natural resources: The Early Action Fund in South America. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Dwan, R., and L. Bailey. 2006. Liberia's Governance and Economic Management Assistance Programme (GEMAP): A joint review by the Department of Peacekeeping Operations' Peacekeeping Best Practices Section and the World Bank's Fragile States Group. UN Peacekeeping and World Bank.
- ECB (Emergency Capacity Building) Project. n.d. The project. www.ecbproject.org/the-project/theproject.
- Elhawary, S., and S. Pantuliano. 2013. Land issues in post-conflict return and recovery. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- Epstein, M. J., and K. Yuthas. 2011. Conflict minerals: Managing an emerging supply-chain problem. *Environmental Quality Management* 21:13–25.
- Fanthorpe, R., and C. Gabelle. 2013. *Political economy of extractives: Governance in Sierra Leone*. Washington, D.C.: World Bank.
- Feiring, B. 2013. *Indigenous peoples' rights to lands, territories and resources*. Rome: International Land Coalition.
- Folke, C., T. Hahn, P. Olsson, and J. Norberg. 2005. Adaptive governance of socio-ecological systems. *Annual Review of Environment and Resources* 30:441–473.
- Garrett, N. 2016. Taming predatory elites in the Democratic Republic of the Congo: Regulating property rights to adjust incentives and improve economic performance in the mining sector. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- GICHD (Geneva International Centre for Humanitarian Demining). 2010. Landmines and land rights in conflict affected contexts. GIHCD Policy Brief. www.gichd.org/fileadmin/GICHD-resources/rec-documents/Landmines-LR-Policy-Brief-Dec2010.pdf.
- Global Witness. 2011. Kimberley Process lets Zimbabwe off the hook (again). Press Release, November 2. www.globalwitness.org/en/archive/kimberley-process-lets-zimbabwe-hook-again/.
- Green, A. 2013. Title wave: Land tenure and peacebuilding in Aceh. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan
- . 2015. Social identity, natural resources, and peacebuilding. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.

- Grenfell, L. 2013. *Promoting the rule of law in post-conflict states*. Cambridge, United Kingdom: Cambridge University Press.
- Grundel, H. 2010. Natural resource governance in conflict-affected contexts. Strengthening the Economic Dimensions of Peacebuilding Practice Note No. 6. London: International Alert. <http://legacy.international-alert.org/sites/default/files/publications/201010PracticeNote6NatResourceGovernance.pdf>.
- Gurara, D. Z., and D. Birhanu. 2012. Large-scale land acquisitions in Africa. *Africa Economic Brief* 3 (5). Tunis. www.afdb.org/leadadmin/uploads/afdb/Documents/Publications/AEB%20VOL%203%20Issue%205%20Mai%202012_FINAL.pdf.
- Haddadin, M. J. 2014. The Jordan River Basin: A conflict like no other. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Harwell, E. E. 2016. Building momentum and constituencies for peace: The role of natural resources in transitional justice and peacebuilding. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Hellum, A., and B. Derman. 2004. Land reform and human rights in contemporary Zimbabwe: Balancing individual and social justice through an integrated human rights framework. *World Development* 32 (10): 1785–1805.
- Helmke, G., and F. Rosenbluth. 2009. Regimes and the Rule of Law: Judicial Independence in Comparative Perspective. *Annual Review of Political Science* 12:345–366.
- Hendrix, C. S., and M. Noland. 2014. Confronting the curse: The economics and geopolitics of natural resource governance. Washington, D.C.: Peterson Institute for International Economics.
- Hill, B. E., and J. Pendergrass. 2011. Training professionals. *The Environmental Forum* 28 (4): 44–52.
- Hohe, T. 2003. Justice without judiciary in East Timor. *Conflict, Security and Development* 3 (3): 335–357.
- Human Security Centre. 2006. *Human Security Brief 2006*. Vancouver, Canada: Liu Institute for Global Issues, University of British Columbia. www.hsrgroup.org/docs/Publications/HSB2006/2006HumanSecurityBrief-FullText.pdf.
- IASG (UN Inter-Agency Support Group on Indigenous Peoples' Issues). 2014. Lands, territories and resources. Thematic paper towards the preparation of the 2014 World Conference on Indigenous Peoples. www.un.org/en/ga/president/68/pdf/wcip/IASG%20Paper%20_%20Lands%20territories%20and%20resources%20-%20rev1.pdf.
- IDPS (International Dialogue on Peacebuilding and Statebuilding). 2011. A new deal for engagement in fragile states. Busan, South Korea. www.oecd.org/site/dacpbsbdialogue/documentupload/49151944.pdf.
- IMF (International Monetary Fund). 2015. The IMF and good governance. <http://www.imf.org/external/np/exr/facts/gov.htm>.
- Internet Society. 2015. The internet and sustainable development. Geneva, Switzerland. www.internetsociety.org/sites/default/files/ISOC-ICTs-SDGs-201506-1.pdf.
- IRIN. 2004. Sao Tome and Principe: Signing first oil exploration agreement delayed. December 22. www.irinnews.org/fr/report/52502/sao-tome-and-principe-signing-of-first-oil-exploration-agreement-delayed.
- . 2005. Sao Tome and Principe: Oil minister resigns as controversy dogs award of second offshore block. May 18. www.irinnews.org/report/54489/sao-tome-and-principe-oil-minister-resigns-as-controversy-dogs-award-of-second-offshore-block.

1030 Governance, natural resources, and post-conflict peacebuilding

- James, T., A. Finlay, M. Jensen, M. Neville, and R. Pillay. 2011. Public access ICT in South Africa. In *Libraries, telecentres, cybercafes, and public access to ICT: International comparisons*, ed. R. Gomez. Hershey, PA: IGI Global.
- Jarvie, J. 2016. Natural resource management and post-conflict settings: Programmatic evolution in a humanitarian and development agency. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Jensen, D. 2012. Evaluating the impact of UNEP's post-conflict environmental assessments. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Jensen, D., and S. Lonergan. 2012. Natural resources and post-conflict assessment, remediation, restoration, and reconstruction: Lessons and emerging issues. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Kakabadse, Y., J. Caillaux, and J. Dumas. 2016. The Peru and Ecuador peace park: One decade after the peace settlement. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Karuru, N., and L. Yeung. 2016. Integrating gender into post-conflict natural resource management. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Kauzya, J.-M. 2005. Decentralization: Prospects for peace, democracy and development. DPADM Discussion Paper.
- Kawamoto, K. 2012. Diamonds in war, diamonds for peace: Diamond sector management and kimberlite mining in Sierra Leone. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- Keili, A., and B. Thiam. 2015. Mitigating conflict in Sierra Leone through mining reform and alternative livelihoods programs for youth. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Kelly, C. 2012. Mitigating the environmental impacts of post-conflict assistance: Assessing USAID's approach. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- King, M. W., M. A. González Pastora, M. Castro Salazar, and C. M. Rodriguez. 2016. Environmental governance and peacebuilding in post-conflict Central America: Lessons from the Central American Commission for Environment and Development. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Klare, M. T. 2012. *The race for what's left: The global scramble for the world's last resources*. Picador.
- Klein, D., and U. Joras. 2016. Natural resources and peacebuilding: The role of the private sector. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Krugman, P. 1987. The narrow moving band, the Dutch disease, and the competitive consequences of Mrs. Thatcher: Notes on trade in the presence of dynamic scale economies. *Journal of Development Economics* 27 (1-2): 41-55.
- Lakhani, S. 2016. Consolidating peace through Aceh Green. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.

- Large, D., ed. 2005. *Corruption and post-conflict reconstruction: Breaking the vicious circle*. Beirut, Lebanon: Lebanese Transparency Association, TIRI, and UNDP.
- Larson, A. M., and J. C. Ribot. 2004. Democratic decentralisation through a natural resource lens: An introduction. *European Journal of Development Research* 16 (1): 1–25.
- Le Billon, P. 2003. Buying peace or fuelling war: The role of corruption in armed conflicts. *Journal of International Development* 15 (4): 413–26.
- . 2006. Securing transparency: armed conflicts and the management of natural resource revenues. *International Journal* 62 (1): 93–107.
- . 2008. Diamond wars? Conflict diamonds and geographies of resource wars. *Annals of the Association of American Geographers* 98 (2): 345–372.
- Lehtonen, M. 2016. Peacebuilding through natural resource management: The UN Peacebuilding Commission’s first five years. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Lim, D. 2006. United Nations governance of failed states: Proposing the foundations of a comprehensive framework. *Monash University Law Review* 32 (2): 296–334.
- Lind, J. 2015. Manufacturing peace in “no man’s land”: Livestock and access to natural resources in the Karimojong Cluster of Kenya and Uganda. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Lockwood, M., J. Davidson, A. Curtis, E. Stratford, and R. Griffith. 2010. Governance principles for natural resource management. *Society & Natural Resources* 23 (10): 986–1001.
- Lujala, P. 2009. Deadly combat over natural resources: Gems, petroleum, drugs, and the severity of armed civil conflict. *Journal of Conflict Resolution* 53:50–71.
- Maconachie, R. 2012. The Diamond Area Community Development Fund: Micropolitics and community-led development in post-war Sierra Leone. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- Maconachie, R., R. Srinivasan, and N. Menzies. 2015. Responding to the challenge of fragility and security in West Africa: Natural resources, extractive industry investment, and social conflict. World Bank.
- Mähler, A. 2012. An inescapable curse? Resource management, violent conflict, and peacebuilding in the Niger Delta. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- Maldonado, J. M., and O. M. Martinez. 2016. Indigenous peoples, natural resources, and peacebuilding in Colombia. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Mason, S. J. A., D. A. Sguaitamatti, and M. P. R. Gröbli. 2016. Stepping stones to peace? Natural resource provisions in peace agreements. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Matthew, R., and A. Hammill. 2012. Peacebuilding and adaptation to climate change. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Matthews, C. M. 2012. Justice Dept. closes Schlumberger FCPA probe. *The Wall Street Journal*, October 25. <http://blogs.wsj.com/corruption-currents/2012/10/25/justice-dept-closes-schlumberger-fcpa-probe/>.

1032 Governance, natural resources, and post-conflict peacebuilding

- McCallin, B. 2013. The role of restitution in post-conflict situations. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- McEvoy-Levy, S. 2011. Children, youth, and peacebuilding. In *Critical issues in peace and conflict studies: Theory, practice, and pedagogy*, ed. T. Matyók, J. Senehi, and S. Byrne. Lanham, MD: Lexington Books.
- Mcintyre, A. 2003. Rights, root causes and recruitment: The youth factor in Africa's armed conflicts. *African Security Review* 12 (2): 91–99.
- Mcintyre, A., E. K. Aning, and P. N. N. Addo. 2002. Politics, war and youth culture in Sierra Leone: An alternative interpretation. *African Security Review* 11 (3): 6–15.
- McKinsey & Company. 2014. Offline and falling behind: Barriers to internet adoption. www.mckinsey.com/insights/high_tech_telecoms_internet/offline_and_falling_behind_barriers_to_internet_adoption.
- Mehyar, M., N. Al Khateeb, G. Bromberg, and E. Koch-Ya'ari. 2014. Transboundary cooperation in the Lower Jordan River Basin. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Meinzen-Dick, R., and R. Pradhan. 2016. Property rights and legal pluralism in post-conflict environments: Problem or opportunity for natural resource management? In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Menkhaus, K. 2013. Making sense of resilience in peacebuilding contexts: Approaches, applications, implications. Geneva Peacebuilding Platform Paper No. 6. www.gppplatform.ch/sites/default/files/PP%2006%20-%20Resilience%20to%20Transformation%20-%20Jan.%202013_2.pdf.
- Mercy Corps. 2007. *Sustainability field study: Understanding what promotes lasting change at the community level*. Portland, OR. www.mercycorps.org/files/file1206487637.pdf.
- Mehlum, H., K. Moene, and R. Torvik. 2006. Institutions and the resource curse. *The Economic Journal* 116 (January): 1–20.
- MINUGUA (United Nations Verification Mission in Guatemala). 2002. Report of the United Nations Verification Mission in Guatemala (MINUGUA) for the Consultative Group meeting for Guatemala. www.iadb.org/regions/re2/consultative_group/gu/minugua_eng.pdf.
- Miyazawa, N. 2013. Customary law and community-based natural resource management in post-conflict Timor-Leste. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- Mokuwa, E., M. Voors, E. Bulte, and P. Richards. 2011. Peasant grievance and insurgency in Sierra Leone: Judicial serfdom as a driver of conflict. *African Affairs* 110 (440): 339–366.
- MRG (Minority Rights Group International). 2012. *State of the world's minorities and indigenous peoples 2012: Events of 2011*. London. www.unesco.org/library/PDF/MRG.pdf.
- Munden Project. 2012. The financial risks of insecure land tenure: An investment view. Washington, D.C.: Rights and Resources Initiative. www.rightsandresources.org/documents/files/doc_5715.pdf.
- Niazi, S. 2015. To build peace, confront Afghanistan's natural resource paradox. *New Security Beat*. www.newsecuritybeat.org/2013/09/build-peace-confront-afghanistans-natural-resource-paradox.
- Nichols, S. S., and M. Al Moumin. 2016. The role of environmental law in post-conflict peacebuilding. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.

- Nichols, S. S., and L. Goldman. 2011. U.S. bilateral assistance to Liberia: Forestry as the cornerstone to peacebuilding. In *Harnessing natural resources for peacebuilding: Lessons from U.S. and Japanese assistance*, ed. C. Bruch, M. Nakayama, and I. Coyle. Washington, D.C.: Environmental Law Institute.
- Niemiec, C. 2015. EU conflict minerals discussions to begin next year. Chemical Watch, November 18. <https://chemicalwatch.com/43597/eu-conflict-minerals-discussions-to-begin-next-year>.
- Nitzschke, H., and K. Studdard. 2005. The legacies of war economies: Challenges and options for peacemaking and peacebuilding. *International Peacekeeping* 12 (2): 222–239.
- Nordström, S. 2016. Promoting transboundary environmental cooperation in Central Asia: The Environment and Security Initiative in Kazakhstan and Kyrgyzstan. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Norfolk, S., and H. Liversage. 2003. Land reform and poverty alleviation in Mozambique. Pretoria, South Africa: Human Sciences Research Council.
- NRC (Norwegian Refugee Council). 2014. Life can change: Securing housing, land and property rights for displaced women. <http://womenshlp.nrc.no/wp-content/uploads/2014/03/GlobalReportWHLP.pdf>.
- OECD (Organisation for Economic Co-operation and Development). 2007. Glossary of statistical terms—Definition of governance. <http://stats.oecd.org/glossary/detail.asp?ID=7236>.
- . 2013a. *African economic outlook 2013: Structural transformation and natural resources*. Paris.
- . 2013b. OECD due diligence guidance for responsible supply chains of minerals from conflict-affected and high-risk areas. 2nd ed. Paris. www.oecd.org/daf/inv/mne/GuidanceEdition2.pdf.
- . 2014. *Fragile states 2014: Domestic revenue mobilisation in fragile states*. Paris. www.oecd.org/dac/governance-peace/conflictandfragility/docs/FSR-2014.pdf.
- . 2015. *Policy framework for investment*. Paris. <http://dx.doi.org/10.1787/9789264208667-en>.
- Oglethorpe, J., A. Van Breda, L. Kintner, S. Lohani, and O. Williams. 2016. Mainstreaming natural resources into post-conflict humanitarian and development action. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- OHCHR (Office of the UN High Commissioner for Human Rights). 2012. *Women and the right to adequate housing*. New York and Geneva, Switzerland.
- . 2013a. Free, prior and informed consent of indigenous peoples. Geneva, Switzerland.
- . 2013b. Report of the United Nations High Commissioner for Human Rights on the role of the public service as an essential component of good governance in the promotion and protection of human rights. A/HRC/25/27.
- Okonjo-Iweala, N. 2013. Good governance of natural resources. High-Level Panel Working Papers Series, prepared for the third HLP meeting in Monrovia, Liberia, Jan. 29-Feb. 1. www.environmentalpeacebuilding.org/assets/Documents/okonjo-iweala-good-governance-of-natural-resources.pdf.
- Oliver, R. W. 2004. *What is transparency?* New York: McGraw-Hill.
- Open Society Foundation. 2006. Mozambique: Justice sector and the rule of law. Johannesburg, South Africa: Open Society Initiative for Southern Africa. www.afrimap.org/english/images/report/Mozambique%20Justice%20report%20%28Eng%29.pdf.

1034 Governance, natural resources, and post-conflict peacebuilding

- Ostrom, E. 2010. Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review* 100 (3): 641–672.
- Paris, R. 2004. *At war's end: Building peace after civil conflict*. Cambridge, UK: Cambridge University Press.
- . 2007. Understanding the “coordination problem” in postwar state-building. Unpublished manuscript, School of Public and International Affairs. Ottawa, Canada: University of Ottawa.
- Payne, C. R. 2016. Legal liability for environmental damage: The United Nations Compensation Commission and the 1990–1991 Gulf War. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Pendergrass, J. 2010. Educating judges about environmental law. *Journal of Court Innovation* 3 (1): 305–314.
- Penouil, M. 1972. Growth poles in underdeveloped regions and countries. In *Growth poles and regional policies*, A. Kuklinski and R. Petrella. Paris: Mouton.
- Perroux, F. 1955. Note sur la notion de poles croissance. *Economic Appliquee* 1 & 2:307–320.
- Philpott, D. 2012. *Just and unjust peace: An ethic of political reconciliation*. New York: Oxford University Press.
- Pinera, J.-F., and R. A. Reed. 2014. A tale of two cities: Restoring water services in Kabul and Monrovia. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Polgreen, L. 2006. One new light in Liberia, an inch back from abyss. *New York Times*, July 27. www.nytimes.com/2006/07/27/world/africa/27liberia.html?_r=0.
- Poulin, D. 2004. Open access to law in developing countries. *First Monday* 9 (12). http://firstmonday.org/issues/issue9_12/poulin/index.html.
- Radics, O., and C. Bruch. Forthcoming. The law of pillage, conflict resources, and jus post bellum. In *Environmental protection and transitions from conflict to peace: Clarifying norms, principles and practices*, ed. C. Stahn, J. Iverson, and J. Easterday. Oxford, UK: Oxford University Press.
- Ratner, B. D. 2015. Building resilience in rural livelihood systems as an investment in conflict prevention. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Ravier, S., A.-C. Vialle, R. Doran, and J. Stokes. 2016. Environmental experiences and developments in United Nations peacekeeping operations. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Reed, M. S. 2008. Stakeholder participation for environmental management: A literature review. *Biological Conservation* 141 (10): 2417–2431.
- Refisch, J., and J. Jenson. 2016. Transboundary collaboration in the Greater Virunga Landscape: From gorilla conservation to conflict-sensitive transboundary landscape management. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Rich, E., and T. N. Warner. 2012. Addressing the roots of Liberia's conflict through the Extractive Industries Transparency Initiative. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Richards, P. 2005. To fight or to farm? Agrarian dimensions of the Mano River conflicts (Liberia and Sierra Leone). *African Affairs* 104 (417): 571–590.

- Rochow, K. W. J. 2016. Concession reviews: Liberian experience and prospects for effective internationalized solutions. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Roe, A. 2015. Swords into plowshares? Accessing natural resources and securing agricultural livelihoods in rural Afghanistan. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Roe, D., F. Nelson, and C. Sandbrook, eds. 2009. *Community management of natural resources in Africa: Impacts, experiences and future directions*. London: International Institute for Environment and Development.
- Roht-Arriaza, N., and J. Mariezcurrena, eds. 2006. *Transitional justice in the twenty-first century: Beyond truth versus justice*. Cambridge, UK: Cambridge University Press.
- Rose-Ackerman, S. 1999. *Corruption and government: Causes, consequences, and reform*. Cambridge, UK: Cambridge University Press.
- Ross, M. L. 1999. The political economy of the resource curse. *World Politics* 51 (2): 297–322.
- . 2004. How do natural resources influence civil war? Evidence from thirteen cases. *International Organization* 58:35–67.
- Ross, M. L., P. Lujala, and S. A. Rustad. 2012. Horizontal inequality, decentralizing the distribution of natural resource revenues, and peace. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- RRI (Rights and Resources Initiative). 2013. Impact of the extractive industry on the collective land and forest rights of people and communities: A summary. www.rightsandresources.org/publication_details.php?publicationID=5915.
- Ruckstuhl, S. M. 2016. Mitigating natural resource conflicts through development projects: Lessons from World Bank experience in Nigeria. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Rustad, S. A., and H. M. Binningsbø. 2010. Rapid recurrence: Natural resources, armed conflict and peace. Working paper. Oslo: Centre for the Study of Civil War.
- Sait, S. 2013. Unexplored dimensions: Islamic land systems in Afghanistan, Indonesia, Iraq, and Somalia. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- Sandbu, M. E. 2012. Direct distribution of natural resource revenues as a policy for peacebuilding. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- SEC (United States Securities and Exchange Commission). 2010. SEC charges seven oil services and freight forwarding companies for widespread bribery of customs officials. Press Release, November 4. www.sec.gov/news/press/2010/2010-214.htm.
- Siakor, S. K. n.d., Beyond EITI: The need for transparency in the awarding of concessions. Heinrich Böll Foundation. www.boell.de/sites/default/files/assets/boell.de/images/download_de/intlpolitics/siakor_transparency_concessions.pdf.
- Smillie, I. 2014. *Diamonds*. Malden, MA: Polity Press.
- Sriram, C. L., and M.-J. Zahar. 2009. The perils of power-sharing: Africa and beyond. *Africa Spectrum* 44 (3): 11–39.
- Sugiura, M., Y. Toguchi, and M. Funicello. 2014. Irrigation management and flood control in post-World War II Japan. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.

1036 Governance, natural resources, and post-conflict peacebuilding

- Talbott, K., Y. Akimoto, and K. Cuskelly. 2016. Myanmar's ceasefire regime: Two decades of unaccountable natural resource exploitation. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Tanaka, L. S., and H. Wittman. 2003. Backgrounder part II: The agrarian question in Guatemala. Land Research Action Network.
- Taylor, M. B., and M. Davis. 2016. Taking the gun out of extraction: UN responses to the role of natural resources in conflicts. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Teitel, R. G. 2000. *Transitional justice*. Oxford, UK: Oxford University Press.
- Thier, J. A. 2009. The future of Afghanistan. Washington, D.C.: United States Institute of Peace. www.usip.org/sites/default/files/resources/foa.pdf.
- Thoumia, F. E., and M. Anzola. 2010. Asset and money laundering in Bolivia, Colombia and Peru: A legal transplant in vulnerable environments? *Crime, Law and Social Change* 53 (5): 437–355.
- Thummarukudy, M., O. Brown, and H. Moosa. 2012. Remediation of polluted sites in the Balkans, Iraq, and Sierra Leone. In *Assessing and restoring natural resources in post-conflict peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.
- Troell, J., and E. Weinthal. 2014. Shoring up peace: Water and post-conflict peacebuilding. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- UN (United Nations). 2005. United Nations principles on housing and property restitution for refugees and displaced persons [Pinheiro Principles]. E/CN.4/Sub.2/2005/17. June 28. New York: United Nations Commission on Human Rights, Sub-commission on the Promotion and Protection of Human Rights. www.unhcr.org/refworld/docid/41640c874.html.
- . 2015. Report of the High-level Independent Panel on Peace Operations on uniting our strengths for peace: politics, partnership and people. A/70/95-S/2015/446*. New York. www.un.org/sg/pdf/HIPPO_Report_1_June_2015.pdf.
- UNCTA (United Nations Country Team Afghanistan). 2013. *Natural resource management and peacebuilding in Afghanistan*. Nairobi, Kenya: UNEP. http://postconflict.unep.ch/publications/UNEP_Afghanistan_NRM_report.pdf.
- UNDP (United Nations Development Programme). 2007. *Governance indicators: A users' guide*. 2nd ed. New York.
- . n.d. About Bosnia and Herzegovina. www.ba.undp.org/content/bosnia_and_herzegovina/en/home/countryinfo.html.
- UN DPA (United Nations Department for Political Affairs) and UNEP (United Nations Environment Programme). 2015. *Natural resources and conflict: A guide for mediation practitioners*. New York and Nairobi, Kenya. http://postconflict.unep.ch/publications/UNDPA_UNEP_NRC_Mediation_full.pdf.
- UNECE (United Nations Economic Commission for Europe). 2014. *The Aarhus Convention: An implementation guide*. 2nd ed. Geneva, Switzerland.
- . 2014. Governance for sustainable development: Integrating governance in the post-2015 development framework. UNDP Discussion Paper. www.undp.org/content/dam/undp/library/Democratic%20Governance/Discussion-Paper--Governance-for-Sustainable-Development.pdf.
- UNEP (United Nations Environment Programme). 2006. *Manual on compliance with and enforcement of multilateral environmental agreements*. Nairobi, Kenya.

- . 2009. *From conflict to peacebuilding: The role of natural resources and the environment*. Nairobi, Kenya. http://postconflict.unep.ch/publications/pcdmb_policy_01.pdf.
- . 2012. *Greening the blue helmets: Environment, natural resources and UN peacekeeping operations*. Nairobi, Kenya. www.un.org/en/peacekeeping/publications/UNEP_greening_blue_helmets.pdf.
- . 2013a. *Background paper on lessons learned: Natural resources, peacebuilding and statebuilding in Africa*. Nairobi, Kenya.
- . 2013b. *Governance for peace over natural resources: A review of transitions in environmental governance across Africa as a resource for peacebuilding and environmental management in Sudan*. Nairobi, Kenya. www.unep.org/disastersandconflicts/Portals/155/countries/sudan/pdf/Governance%20for%20Peace_Sudan_Web.pdf.
- . 2014a. *Relationships and rights: Environmental governance for peacebuilding and resilient livelihoods in Sudan*. Nairobi, Kenya. http://postconflict.unep.ch/publications/UNEP_Sudan_RnR.pdf.
- . 2014b. UNEP and World Bank partnership: “Mapping and assessing the performance of extractive industries in fragile states.” In *Environmental cooperation for peacebuilding*. www.unep.org/disastersandconflicts/portals/155/dnc/docs/qpr/BPR_Dec_14_Chapter_03.pdf.
- UNEP (United Nations Environment Programme) and NEPA (National Environmental Protection Agency). n.d. A guide to Afghanistan’s 2007 Environmental Law. http://postconflict.unep.ch/publications/afg_env_law.pdf.
- UNEP (United Nations Environment Programme), United Nations Entity for Gender Equality and the Empowerment of Women, United Nations Peacebuilding Support Office, and United Nations Development Programme. 2013. *Women and natural resources: Unlocking the peacebuilding potential*. www.unep.org/disastersandconflicts/Introduction/ECP/WomenandNaturalResourcesinPeacebuilding/tabid/131156/Default.aspx.
- UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific). 2009. What is good governance? www.unescap.org/resources/what-good-governance.
- UNHCR (United Nations High Commissioner for Refugees). 2015. *World at war: UNHCR global trends—Forced displacement in 2014*. <http://unhcr.org/556725e69.html>.
- UNIFEM (United Nations Development Fund for Women). 2010. Women’s participation in peace negotiations: Connections between presence and influence. www.unwomen.org/~media/headquarters/media/publications/unifem/0302_womensparticipationinpeacenegotiations_en.pdf.
- UNFT (United Nations Interagency Framework Team for Preventive Action). 2012a. *Land and conflict: Toolkit and guidance for preventing and managing land and natural resources conflict*. New York. http://postconflict.unep.ch/publications/GN_Land_Consultation.pdf.
- . 2012b. *Toolkit and guidance for preventing and managing land and natural resources conflict: Renewable resources and conflict*. New York. www.un.org/en/events/environmentconflictday/pdf/GN_Renewable_Consultation.pdf.
- UNSC (United Nations Security Council). 1999. Resolution 1272. S/RES/1272 (1999). October 25.
- . 2000. Resolution 1325. S/RES/1325 (2000). October 31.
- . 2003. Resolution 1509. S/RES/1509 (2003). September 19.
- . 2004. The rule of law and transitional justice in conflict and post-conflict settings: Report of the Secretary-General. S/2004/616. August 23. www.unrol.org/files/2004%20report.pdf.

1038 Governance, natural resources, and post-conflict peacebuilding

- . 2006. Resolution 1704. S/RES/1704 (2006). August 26.
- . 2008a. Resolution 1820. S/RES/1820 (2008). June 19.
- . 2008b. Resolution 1857. S/RES/1857 (2008). December 22.
- . 2009a. Resolution 1888. S/RES/1888 (2009). September 30.
- . 2009b. Resolution 1889. S/RES/1889 (2009). October 5.
- . 2009c. Resolution 1896. S/RES/1896 (2009). November 30.
- . 2010. Resolution 1960. S/RES/1960 (2010). December 16.
- . 2013a. Resolution 2106. S/RES/2106 (2013). June 24.
- . 2013b. Resolution 2122. S/RES/2122 (2013). October 18.
- . 2015. Resolution 2250. S/RES/2250 (2015). December 9. [www.un.org/en/ga/search/view_doc.asp?symbol=S/RES/2250\(2015\)](http://www.un.org/en/ga/search/view_doc.asp?symbol=S/RES/2250(2015)).
- UNSG (United Nations Secretary-General). 2004. The rule of law and transitional justice in conflict and post-conflict societies: Report of the Secretary-General. S/2004/616. August 23. New York: United Nations Security Council.
- UNU (United Nations University) and ITU (International Telecommunication Union). 2012. Greening ICT supply chains—Survey on conflict minerals due diligence initiatives. www.itu.int/dms_pub/itu-t/oth/4B/01/T4B010000080001PDFE.pdf.
- Unruh, J., and R. C. Williams. 2013. Lessons learned in land tenure and natural resource management in post-conflict societies. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- USAID (U.S. Agency for International Development). 2013. Land tenure, property rights, and gender: Challenges and approaches for strengthening women's land tenure and property rights. USAID Issue Brief. www.usaidlandtenure.net/sites/default/files/USAID_Land_Tenure_Gender_Brief_061214.pdf.
- Van der Ploeg, F. 2011. Natural resources: Curse or blessing? *Journal of Economic Literature* 49 (2): 366-420.
- Vardanyan, M., and R. Volk. 2014. Transnational cooperation over shared water resources in the South Caucasus: Reflections on USAID interventions. In *Water and post-conflict peacebuilding*, ed. E. Weinthal, J. Troell, and M. Nakayama. London: Earthscan.
- Vialle, A.-C., C. Bruch, R. Gallmetzer, and A. Fishman. 2016. Peace through justice: International tribunals and accountability for wartime environmental damage. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Waldman, M. 2008. Community peacebuilding in Afghanistan: The case for a national strategy. Oxford, UK: Oxfam International. www.oxfam.ca/news-and-publications/publications-and-reports/community-peacebuilding-in-afghanistan-the-case-for-a-national-strategy.
- Waleij, A. 2016. Crime, credibility, and effective peacekeeping: Lessons from the field. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Waleij, A., T. Bosetti, R. Doran, and B. Liljedahl. 2016. Environmental stewardship in peace operations: The role of the military. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Walker Painemilla, K., A. B. Rylands, A. Woolfer, and C. Hughes, eds. 2010. *Indigenous peoples and conservation: From rights to resource management*. Arlington, VA: Conservation International.
- Walters, J. T. 2015. A peace park in the Balkans: Cross-border cooperation and livelihood creation through coordinated environmental conservation. In *Livelihoods, natural*

- resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Waugh, J., and J. Murombedzi. 2016. Social benefits in the Liberian forestry sector: An experiment in post-conflict institution building for resilience. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Webersik, C., and M. Levy. 2016. Reducing the risk of conflict recurrence: The relevance of natural resource management. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Weinthal, E., and P. J. Luong. 2006. Combatting the resource curse: An alternative solution to managing mineral wealth. *Perspectives on Politics* (4) 1: 35–53.
- Wennmann, A. 2005. Resourcing the recurrence of intra-state conflict: Parallel economies and their implications for peacebuilding. *Security Dialogue* 36 (4): 479–494.
- . 2007. The political economy of conflict financing: A comprehensive approach beyond natural resources. *Global Governance* 13 (3): 427–444.
- . 2010. *Grasping the strengths of fragile states: Aid effectiveness between “top-down” and “bottom-up” statebuilding*. CCDP Working Paper No. 6. Geneva, Switzerland: Graduate Institute of International and Development Studies. http://graduateinstitute.ch/files/live/sites/iheid/files/sites/ccdp/shared/Docs/Publications/Working%20paper_6_BD.pdf.
- . 2011. *The political economy of peacemaking*. London: Routledge.
- Westrik, C. 2015. Transboundary protected areas: Opportunities and challenges. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Williams, R. C. 2013a. Post-conflict land tenure issues in Bosnia: Privatization and the politics of reintegrating the displaced. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- Williams, R. C. 2013b. Title through possession or position? Respect for housing, land, and property rights in Cambodia. In *Land and post-conflict peacebuilding*, ed. J. Unruh and R. C. Williams. London: Earthscan.
- Winters, M. S., and J. A. Gould. 2012. Petroleum blues: The political economy of resources and conflict in Chad. In *High-value natural resources and post-conflict peacebuilding*, ed. P. Lujala and S. A. Rustad. London: Earthscan.
- Wolf, A. T., S. B. Yoffe, and M. Giordano. 2003. International water: Identifying basins at risk. *Water Policy* 5 (1): 29–60.
- World Bank. 2001. *Decentralization & Subnational Regional Economics*. Available at: <http://www1.worldbank.org/publicsector/decentralization/what.htm>
- . 2009. Worldwide governance indicators, 1996–2008. <http://info.worldbank.org/governance/wgi/index.asp>.
- . 2014. Growth poles program: Political economy of social capital. Washington, D.C.: World Bank. <https://openknowledge.worldbank.org/handle/10986/18733>.
- Wrist Sorensen, L. 2016. The power of economic data: A case study from Rwanda. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Yilmaz, S., Y. Beris, and R. Serrano-Berthet. 2008. *Local government discretion and accountability: A diagnostic framework for local governance*. Local Governance & Accountability Series Paper No. 113. Washington, D.C.: World Bank.

1040 Governance, natural resources, and post-conflict peacebuilding

- Yoboue, K. K. M. 2016. Stopping the plunder of natural resources to provide for a sustainable peace in Côte d'Ivoire. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Young, H., and L. Goldman. 2015. Managing natural resources for livelihoods: Helping post-conflict communities survive and thrive. In *Livelihoods, natural resources, and post-conflict peacebuilding*, ed. H. Young and L. Goldman. London: Earthscan.
- Zahler, P., D. Wilkie, M. Painter, and J. C. Ingram. 2016. The role of conservation in promoting stability and security in at-risk communities. In *Governance, natural resources, and post-conflict peacebuilding*, ed. C. Bruch, C. Muffett, and S. S. Nichols. London: Earthscan.
- Zeitvogel, K. 2015. Fueled by corruption, South Sudan war enters third year. IRIN, December 17. www.irinnews.org/report/102304/fueled-by-corruption-south-sudan-war-enters-third-year.