



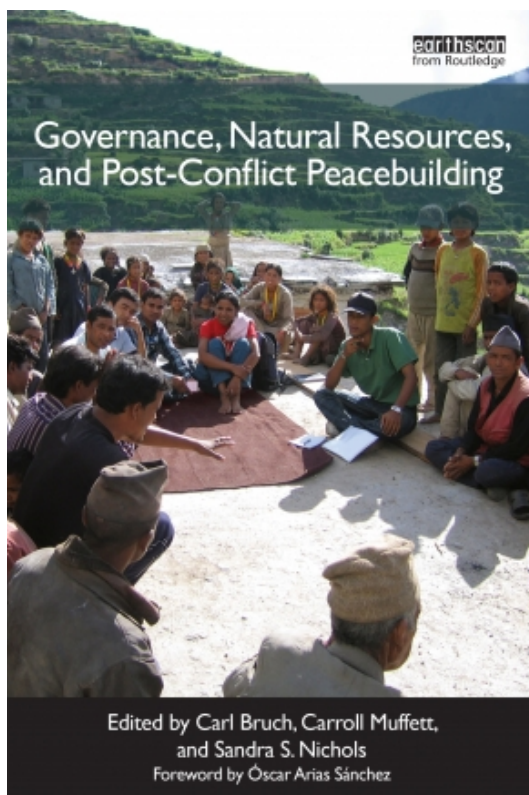
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The Role of Environmental Law in Post-Conflict Peacebuilding

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The role of environmental law in post-conflict peacebuilding

Sandra S. Nichols and Mishkat Al Moumin

After arms are laid aside and a peace agreement is signed, post-conflict societies face an array of pressing concerns. Security must be established, and basic necessities such as food, water, and shelter must be provided. At the same time, the groundwork for the long transition from peacebuilding to sustainable development must be laid. In many cases, the environment and natural resources were central to the causes or financing of the conflict. Regardless of whether they were directly involved in the conflict, the environment and natural resources are always necessary for rebuilding peace, whether in the realm of strengthening economic recovery, restoring livelihoods, providing basic services, or fostering cooperation and dialogue.

Post-conflict peacebuilding presents an opportunity for a country to reset or revise basic presumptions about how the government is organized and operates—and, ultimately, about the social contract between a country's people and its government. This fresh start may be a chance to reflect on hard-learned lessons from the conflict and to develop more effective governance structures. Given the importance of natural resources to conflict and peace, reform of environmental laws is often a keystone for post-conflict transformation.¹

This chapter explores the broad category of environmental legal instruments that cover a range of topics, from pollution control to natural resources management. Developing these instruments requires considering a number of policy decisions, including natural resource management and ownership, legal pluralism, resource sharing, transparency, gender, and sustainability.

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¹ For purposes of this chapter, the phrase *environmental laws* is used broadly to refer to a range of laws governing pollution control, environmental impact assessment, protected areas, and various natural resource sectors (including land, water, pasturage, forests, fisheries, biodiversity, mining, and oil and gas).

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The chapter is divided into four major sections: (1) a broad overview of the possible alternatives in the process of reforming environmental laws; (2) a discussion of different types of environmental legal instruments, illustrating the breadth of instruments and approaches; (3) an exploration of six common policy issues that, in course of reforming environmental laws, often determine how legislation is developed and shape final legal framework; and (4) a brief summary of key points.

THE PROCESS OF REFORM

In an increasing number of cases, peace agreements include provisions on the environment and natural resources (Bruch et al. 2015). Regardless of whether a peace agreement has such a provision, before any steps are taken to reform environmental laws, information must be gathered and analyzed, to ensure that the reform reflects the needs and capacities on the ground. This is done through an assessment process.

The assessment is the first step in the development of a strategic framework that will inform the goals, objectives, and approaches for guiding peacebuilding projects. Effective post-conflict environmental assessments can uncover the environmental causes of conflict as well as the continuing environmental threats, needs, and opportunities facing a post-conflict society (Conca and Wallace 2012; Jensen 2012). Assessments that consider the role that natural resources may have played in generating and sustaining conflict can help to identify ways to resolve hostilities and prevent a relapse to conflict. They reveal not only which issues are of the highest priority, but can also help to suggest effective responses. In addition, environmental assessments carried out before the inception of new programs can help to ensure that the environmental impacts of peacebuilding efforts are minimized, and do not exacerbate existing infrastructural, social, and environmental concerns (Kelly 2012). Ideally, data collection should begin during the conflict.²

In the immediate aftermath of conflict, post-conflict governments and the international community are under immense pressure to deliver on the promise of peace and produce tangible results, so visible programs like construction projects often proceed quickly. In this context, rapid environmental and social assessments are critical for identifying potential environmental and social impacts and mitigating or preventing those impacts, while also enabling projects to move forward during the time period when donor attention is focused on the particular post-conflict country (Kelly 2005). Finally, experience has demonstrated the

² Data collection prior to the cessation of hostilities gives a head start to post-conflict peacebuilding activities. It is imperative to identify environmental governance needs that support peacebuilding and to integrate them into needs assessments from the outset, as this provides an important policy anchor and political profile that enables follow-up work to be conducted and financed (Jensen and Lonergan 2012).

importance of assessing the status of the environment and natural resource endowments in order to calibrate planning appropriately and avoid raising unreasonable expectations (Rustad, Lujala, and Le Billon 2012).

Post-conflict environmental assessments are especially critical for determining where the legal framework is strong, and where revisions or further development might be necessary to support the transition to peace. Assessments can highlight, for example, where the existing legal framework needs to be revised to deal with inequities, improve implementation, address legal pluralism, or change institutional arrangements and practices. Reforms can take the form of new constitutional provisions, new environmental laws, amendments to existing laws, or new regulations.

Countries recovering from armed conflict have adopted a range of approaches for revising their environmental laws. If laws addressing sustainable forest management were lacking, as in Afghanistan, or if laws were deeply flawed or had become illegitimate during conflict, a post-conflict country can choose to develop a new legal tool all its own, or can draw from models or experiences of others (Bowling and Zaidi 2015). It is essential, however, that the new laws be designed to fit within the broader legal and institutional framework, including administrative, constitutional, property, and traditional laws. In other cases, such as the Liberia forest sector, where governance failures during the war came largely from implementation problems rather than from the law itself, amendments may be preferable to an entirely new legal framework (Altman, Nichols, and Woods 2012). In still other cases, such as reforming the land sectors in Mozambique and Cambodia, reform was undertaken in stages, over time (Unruh and Williams 2013b).

Regardless of whether laws are developed anew or revised, and whether the measures are comprehensive or incremental, public consultation and capacity building are essential to every step of the legal development and reform process, from assessment to debate to drafting to implementation of the new legal instrument. The next three subsections consider the sources of new legal instruments, process considerations, and capacity building.

Sources of new legal instruments

Development of new laws can take years—time that is scarce in countries emerging from conflict, where there is often a desire to move quickly. In such circumstances, legal drafters often use a model law or a law from another country as the basis for domestic legislation. Such imported laws are commonly part of regional integration efforts—and, although this approach can save time and resources, it can be problematic for both substantive and political reasons.

When Timor-Leste gained independence from Indonesia, the United Nations Transitional Administration in East Timor proposed continuing to apply existing Indonesian laws (including the land law) on an interim basis. However, the Timorese rejected any Indonesian influence, even on a provisional basis, in favor

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of developing a completely new system. More than a decade after independence, the country still lacks a land law, making it difficult to resolve land disputes (Unruh and Williams 2013b).

While Timor-Leste sought to throw off the laws imposed by Indonesia, elsewhere regional approaches to developing legislation have proven effective, particularly when undertaken in a consultative process. Such approaches include model legislation that provides a harmonized approach to a particular environmental issue. For example, the Executive Secretariat of the Central American Commission for Environment and Development General Directorate for Environment (CCAD) played a critical role in regional political and economic integration—as well as in the harmonization of laws, including environmental laws—across conflict-affected Central American countries.³

The CCAD Executive Secretariat undertook a consultative process with the countries in drafting a progressive model environmental law. This law was passed by the Central American Parliament and then transmitted to the environmental agency of each Central American country, for incorporation into national law through domestic legislative processes.⁴ El Salvador's warring factions signed the peace agreement in 1992, and the environmental framework law was one of the first major post-conflict legislative initiatives. Amid the concerns of the recovering society, environmental protection was not at the forefront at the time, and when the draft was presented there was no popular support for the legislative effort (Bijlsma 2005). Business interests rejected the proposal outright, and there was no other faction to counter the business community's general resistance to regulation. With continued international support, however, the Executive Secretariat returned to El Salvador in 1994, with a new strategy for Salvadorans to make the model law their own: comprehensive public consultation.⁵ The team from the Executive Secretariat visited all fourteen departments of El Salvador and presented the draft to each sector of society: every public, private, and governmental institution was invited to participate (World Bank 2007). The team returned to the capital having built up a great deal of political momentum. Business interests, however, had not softened in their opposition and again refused to participate. But this time the results were different. The private sector underestimated the political support that had built up during the comprehensive stakeholder consultation process. Public support outweighed their opposition and, after some minor amendments, the Ley de Medio Ambiente was passed in 1998.⁶

³ See Matthew Wilburn King, Marco Antonio González Pastora, Mauricio Castro Salazar, and Carlos Manuel Rodríguez, "Environmental Governance and Peacebuilding in Post-Conflict Central America: Lessons from the Central American Commission for Environment and Development," in this book.

⁴ Personal communication, Marco Gonzalez-Pastora, executive secretary of the Central American Commission for Environment and Development General Directorate for Environment, March 11, 2010.

⁵ Personal communication, Gonzalez-Pastora, 2010.

⁶ For the text of the law, see www.asamblea.gob.sv/eparlamento/indice-legislativo/buscador-de-documentos-legislativos/ley-del-medio-ambiente.

While the general population did not have any substantive objections to the proposed environmental law, it was necessary to build public support to overcome the negative sentiments associated with the fact that it had originated outside the country, so that the country could adopt the law.

Process considerations

Decisions about how to structure peacebuilding activities often are made in an atmosphere of desperately urgent needs. Immediately following conflict, programming priorities are being set and resources allocated, magnifying the pressure to act quickly. This pressure for quick results is in tension with the need to take time to produce legal tools that are legitimate, contextually appropriate, well designed, and owned by the country that will need to live with the laws.

In many cases, gradually developing the law through a participatory process can bring the most durable results. In Nepal, for example, the purposes and functions of community forest user groups developed gradually, following constructive engagement over time (Adhikari and Adhikari 2010; Sanio and Chapagain 2012). In the mid-1970s, recognizing the limitations of centralized forest management, the Nepalese government launched a community forest program to curb Himalayan forest degradation. Over the course of a decade of community forest stakeholder dialogues and national workshops, the community forest program evolved from one that initially emphasized preservation and conservation to a broad-based plan for sustainability, development, and livelihood improvement. Nepal's Ministry of Forest and Social Conservation similarly evolved from a policing body to a facilitator of stakeholder dialogue (Ojha, Persha, and Chhatri 2009).

Experience in Mozambique similarly illustrates how an iterative approach can be necessary to effectively implement reforms. After the 1994 elections, the government initiated a three-year, participatory land-policy reform process engaging the wide range of indigenous, smallholder, and commercial stakeholders in the country. Dynamic dispute resolution mechanisms and research and policy centers were established (Unruh 2010). Three key pieces of legislation resulted from the engagement: (1) the Land Law, (2) the Land Regulations, and (3) the Technical Annex.

In Cambodia, an iterative approach to land reform not only allowed the country to identify how best to introduce a new system for land management and then to scale up the reforms, it also allowed for time to develop the political will to implement the reforms. In 1992, Cambodia passed a new land law establishing a comprehensive land rights registration system (World Bank 2009). The system relied on landholders coming to a government office and register their parcels. In the first year, 4.5 million first registration claims were submitted, and the land registry was overwhelmed. The system was ineffective, in part due to flaws in the process and rampant corruption. This failure caused disillusionment and resulted in increased disputes, most of which were dismissed by the equally flawed dispute resolution system (Torhonen and Palmer 2004).

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After the failure of the first land registration attempt under the 1992 Land Law, Cambodia recognized that economic development required measures to strengthen land tenure rights and improve land management (World Bank 2009). In 1995, the Cambodian government began piloting a new land registration system that employed a systematic method to complete the registration process for an entire area at one time, rather than in response to claims brought on an individual basis. Through the one-parcel–one-visit approach, an officer could register each parcel with one visit, using the landholder as a surveying assistant (Torhonen and Palmer 2004).

Capacity building

An essential element in effective legal reform is the incorporation of activities and approaches to build the skills and capacity of those who will implement the new legal regime. Failing to build sufficient capacity to implement the new laws can undermine reform efforts. For example, in Liberia, although capacity building had been incorporated into the structure of the Liberia Forest Initiative, the U.S. government ended its support for commercial forestry when implementation began. This gap in capacity hampered the first steps of implementation, resulting in key aspects of reform not being carried out correctly (Global Witness 2009). Capacity building must be recognized as a critical entrance strategy, not as an exit strategy to be tacked on once project objectives are accomplished by outside actors.

In post-conflict Afghanistan, the United Nations Environment Programme (UNEP) assisted the National Environmental Protection Agency (NEPA) in developing the framework environmental law, which included provisions for environmental impact assessment (EIA) (Bowling and Zaidi 2015). Recognizing the importance of technical capacity to effectively implement the EIA requirements, UNEP provided technical training to line ministry staff, supported the development of professional and technical expertise within Kabul University, and offered training on the procedures and rules for the operation of an EIA board of experts (UNEP 2009).

Lack of technical capacity can also be overcome internally and in a decentralized way, as demonstrated by the efforts of the Executive Secretariat in El Salvador's Ministry of Agriculture (Secretaria Ejecutiva del Medio Ambiente, or SEMA). El Salvador's 1992 Plan for National Reconstruction requires government agencies to carry out EIAs. Many agencies, however, lacked environmental expertise to conduct EIAs. SEMA issued an environmental guidelines sourcebook, equipping agencies with recommendations for carrying out EIAs and mitigating adverse environmental impacts. In 1994, EIA divisions were established within governmental agencies, including the National Association for Waterworks and Sewage Systems and the Hydroelectric Executive Commission. Finally, in 1998, the National Assembly mandated EIAs for all types of development activities (Al Moumin 2010).

LEGISLATIVE DEVELOPMENT AND REFORM

The wide range of legal instruments governing the environment includes constitutional provisions, framework environmental laws, sectoral laws, EIA laws, pollution control laws, and regional environmental agreements, and countries engaging in reform of such instruments face a range of substantive and procedural considerations. This section explores the various types of environmental legislation.

Constitutions

After conflict, many countries revise their constitutions to memorialize negotiated settlements between conflicting factions, establish mechanisms for mediating future disputes, and enumerate individual rights and government responsibilities. A formal recognition of environmental rights demonstrates the assignment of high priority to environmental protection, which can be especially important when people's rights to land and other natural resources figured in the conflict.

Constitutional environmental rights can take a variety of forms,⁷ including provisions on (1) the right to life, or to a healthy environment;⁸ (2) ownership of land and other natural resources;⁹ (3) procedural rights, such as the right to information, participation, and accountability;¹⁰ and (4) rights related to governance structure, which may be concerned with issues such as wealth sharing or multilevel governance.¹¹ The histories of the constitutions of Nepal, South Sudan, and Iraq offer examples of the development of constitutional frameworks governing natural resources, with varying degrees of success.

⁷ On constitutional environmental law generally, see Bruch, Coker, and VanArsdale (2007) and May (2013).

⁸ For example, article 49 of Rwanda's constitution states that "[e]very citizen is entitled to a healthy and satisfying environment." Similar rights are recognized in the post-conflict constitutions of Afghanistan, Algeria, Angola, Armenia, Azerbaijan, Burundi, Cambodia, Chad, Colombia, Congo, Croatia, Democratic Republic of the Congo, Egypt, Mozambique, Myanmar, Nepal, Palestine, Panama, Senegal, Somalia, South Sudan, Sudan, Tajikistan, Timor-Leste, and Uganda, as well as in the subnational constitution of Chechnya.

⁹ For example, articles 30(II)(17) and 108(15), respectively, of Bolivia's 2009 constitution recognize indigenous peoples' rights to natural resources, including "the autonomous indigenous territorial management, exclusive use and exploitation of renewable natural resources within their territories" and all Bolivians have the duty to "[p]rotect and defend the natural resources and contribute to its sustainable use, to preserve the rights of future generations."

¹⁰ For example, article 2(4) of Peru's constitution states that "[a]ll persons have the right . . . [t]o request, without providing a reason, information that one needs, and to receive that information from any public entity within the period specified by law, at a reasonable cost."

¹¹ Section 168(5) of the 2011 Transitional Constitution of the Republic of South Sudan states that "[t]he sharing and allocation of resources and national wealth shall be based on the premise that all states, localities and communities are entitled to equitable development without discrimination."

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On May 18, 2006, Nepal's Constituent Assembly abolished the monarchy, establishing Nepal as a republic. The struggle for rights was reflected in the constitutional reform process. On April 10, 2008, the Constituent Assembly established a process to draft a new constitution for the permanent federal democratic republic government. With approximately 85 percent of the population relying on natural resources for their livelihoods, civil society strongly advocated for constitutional protections for indigenous peoples and those affected by unpredictable climate patterns (Aryal 2009). The Constituent Assembly's Committee on Natural Resources, Economic Rights, and Revenue Allocation responded with studies, performed public outreach, and issued a concept paper on the topic. Civil society groups urged the incorporation of explicit environmental rights—and equally explicit individual responsibilities—within the constitutional framework, including the constitutional right to a healthy, clean, and sustainable environment; the right to participate in environmental decision making processes; the right to full compensation for environmental victims, in case of environmental degradation; and the right to adapt to climate change (Belbase 2010). While these concerns were substantially reflected in the draft constitution, as of April 2015, the constitution remained under development.

Environmental rights were also prominent in constitutional development in South Sudan. On July 7, 2011, the South Sudan Legislative Assembly ratified the 2011 Transitional Constitution of the Republic of South Sudan two days before formally declaring the nation's independence (Sudan Tribune 2011). The transitional constitution enshrines broad environmental ideals, providing every citizen with the right to a clean and healthy environment and the right to have environmental protections through (1) prevention of pollution and ecological degradation; (2) conservation efforts; and (3) ecologically sustainable use of natural resources.¹² The Transitional Constitution strikes a balance between environmental protection and resource extraction, stating in article 41(4) that “[a]ll levels of government shall promote energy policies that will ensure that the basic needs of the people are met while protecting and preserving the environment.” The development and strengthening of mechanisms to balance or prioritize these sometimes-competing interests lag, however, and the civil war that started in December 2013 has further slowed the development of such mechanisms.

Iraq's experience in constitutionally structuring natural resources governance is both promising and cautionary. In 2005, the Iraqi Transitional Government faced the challenge of drafting a constitution that balanced national priorities and regional demands for greater sovereignty. In particular, due to tensions between Kurdish and Shia populations, the transitional government heatedly debated the provisions that allocated authority over natural resources, including oil, gas, and water. In their pursuit of sovereignty, Kurds demanded a greater role

¹² The transitional constitution also sets out several ministerial and advisory positions relating to the environment and resource extraction, including the Wildlife Service and the Petroleum and Gas Council.

in managing natural resources in their region, including recognition of contracts that had previously been concluded by the Kurdistan Regional Government (KRG) (Deeks and Burton 2007).

Approved on October 15, 2005, through a popular referendum, the Iraqi Constitution gives the regions and the governorates all powers not explicitly assigned to the central government (Iraqi Constitution, art. 115).¹³ Authority over internal water resources is shared between the national government and the regions (art. 114(7)), and authority for environmental regulation is shared between the national government, the regions, and the governorates (art. 114(3)).¹⁴

Distribution of oil and gas rights was an especially contentious issue. Ultimately, the popular ownership of oil and the national government's authority over oil fields were limited to currently exploited oil fields, with distribution proportional to the population across the country and special allotments to regions that had previously been deprived of proceeds. Since the constitution does not address the issue of future oil fields, the regions potentially have full ownership and authority over their management, and over the distribution of the resulting revenue (Deeks and Burton 2007).¹⁵

Framework environmental laws

Regardless of whether there are constitutional provisions relevant to the environment, as there often are, many post-conflict countries seeking to address the environmental dimensions of recovery and development find it necessary to

¹³ For the text of Iraq's constitution, see www.uniraq.org/documents/iraqi_constitution.pdf.

¹⁴ The Kurds argued for exclusive regional authority over water running through their region. The Shia, concerned that the Kurds would divert the significant water resources from the Tigris, succeeded in keeping the authority concurrent.

¹⁵ The Kurds sought to limit the application of popular ownership and central authority to current fields, with distribution proportional to population across the country and special allotments to regions that had previously been deprived of proceeds. Reparation was intended to redress the grievances of Kurds and Shia who argued that they had lost agricultural land to oil development and had suffered environmental damage without compensation or benefits. The Kurds were also concerned about ensuring that contracts made by their regional government with oil companies were recognized. There was a tussle over the balance of power regarding development of future petroleum resources, with the Kurdish proposal being included in the final constitution. In negotiating these provisions, the Shia asserted that they should apply to all natural resources, particularly insisting on inclusion of oil, gas, and minerals, but they eventually acceded to the exclusion of minerals, and thereby lost centralized authority over the phosphate industry. The oil and gas language was placed in an article situated between one article on exclusive authorities and another on joint authorities, distinguishing the joint authority over oil and gas. Ambiguity about the ultimate interpretation of exclusive versus concurrent authorities could thus extend to authority over provisions on oil and gas, although the legislative history and the fact that oil was ultimately treated in a separate provision suggests that it does not. For a detailed analysis of governance and oil management in Iraq, see Al Moumin (2012).

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review or even introduce new legal and institutional frameworks for managing environmental issues. Post-conflict experiences demonstrate that conflicts frequently undermine the effectiveness and capacity of environmental laws and institutions; and in countries where conflict erupted before the widespread adoption of environmental laws and institutions, which occurred in the 1990s, such laws and institutions may never have developed at all. For example, it was not until 2002 that Afghanistan's Grand Council, the Loya Jirga, mandated environmental management and established the state's first environmental management authority, which evolved into the NEPA in 2005 (UNEP 2006).

Resource-specific laws

High-value natural resources are often at the center of conflict (Rustad, Lujala, and Le Billon 2012). In some cases, existing laws were simply ignored or suspended, and were thus not to blame for the discord. But frequently, changes in the law may be needed to address gaps, adjust management, and improve allocation of natural resources to reduce the potential for conflict over resources. Indeed, where sweeping legal reform is not possible, targeted amendments can achieve many of the desired changes, while minimizing the appearance of radical reform. Sierra Leone and Liberia illustrate two such cases.

In Sierra Leone, diamonds funded a brutal, eleven-year war. Legal reforms improved governance and enabled the government to regain control of the diamond industry and stop the cycle of violence. In 2001, the government of Sierra Leone established the Diamond Area Community Development Fund (DACDF), which supports local diamondiferous communities by discouraging illicit mining and improving local schools, clinics, roads, and other infrastructure (Maconachie 2012). The DACDF receives one-quarter of the 3 percent diamond export tax, which is disbursed to each chiefdom's development committee based on the number of mining licenses in the chiefdom. The DACDF, however, has been troubled by corruption, lack of transparency and accountability, and inadequate monitoring (NRGI n.d.).

In 2009, the legislature passed the Mines and Minerals Act, which replaced the Mines and Minerals Decree of 1994. In addition to increasing royalty rates on precious stones, the 2009 law requires extensive reporting and disclosure of information regarding revenues and payments by mineral rights holders and the government. In addition, holders of large-scale licenses must negotiate community development agreements with affected communities before pursuing mining activities, and must spend at least 0.1 percent of revenues on community initiatives (NRGI n.d.).

In Liberia, timber was the central conflict resource. At the signing of the peace agreement in 2003, the role that timber revenues had played in funding arms purchases and military training was well known (Nichols and Goldman 2011). Agreeing that natural resource reform was necessary to transition to peace, the Liberian government and the international community established the Liberia

Forest Initiative—a collaboration of U.S. government agencies, international development agencies, and international and Liberian NGOs—to develop a forest sector reform process that would assess current forest practices, draft legislation, and propose regulations (Altman, Nichols, and Woods 2012).

The Liberia Forest Initiative’s assessment revealed the need for some legislative changes, but it concluded that a complete overhaul of the law governing the forest sector was not necessary. While the 2006 National Forestry Reform Law significantly reformed the sector, many of the legal provisions were not completely new (Altman, Nichols, and Woods 2012).¹⁶ One amendment, for example, was a provision stating that timber companies had no ownership rights in the forests; instead, companies would be permitted to sustainably harvest trees on the condition that they met applicable legal requirements.¹⁷

In cases where an assessment reveals that the legal framework governing the environment and natural resources is adequate, but implementation is ineffective, new regulations to more effectively execute existing environmental laws may help. For example, the Liberian Forest Initiative helped Liberia to develop ten regulations necessary to establish sustainable commercial logging (Nichols and Goldman 2011). These regulations addressed, among other issues, public participation, biodiversity conservation, sustainable forest management, reporting requirements, and forestry fees, and were adopted following a notice-and-comment period in which Liberia’s Forest Development Authority reviewed hundreds of public comments and incorporated them into the final regulations; this was the first time Liberia had undertaken notice-and-comment rulemaking in any sector (Nichols and Goldman 2011).

While consultative and iterative legal reform processes are often ideal, when there is insufficient time to draft, debate, and adopt legislation, executive decrees can provide a targeted response. This may be most appropriate for specific issues or actions. Liberia offers an example of the use of an executive mandate to quickly and efficiently improve natural resource governance. In 2006, President Ellen Johnson Sirleaf’s first executive order upon taking office “declare[d] all purported forest concessions null and void ab-initio.”¹⁸ The order voided all concession agreements, management contracts, forest management utilization contracts, and salvage permits. It also ordered the Forest Development Authority to grant or allocate future forest concessions, but only after specific forest reform measures had been instituted and regulations passed.

¹⁶ Four statutes made up Liberia’s forestry law before the National Forest Reform Law: the 1953 Forest Act, the 1957 Supplementary Act, the 1976 Forestry Development Authority, and the 2000 National Forestry Law (McAlpine, O’Donohue, and Pierson 2006).

¹⁷ Personal communication, Bruce Myers, senior attorney, Environmental Law Institute, May 6, 2009.

¹⁸ GOL Forest Sector Reform, Executive Order No. 1. www.emansion.gov.lr/doc/EXECUTIVE%20ORDER%20_%201%20-%20Forest%20Sector%20Reform.pdf.

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Executive decrees are not without their limitations, though, and are only as legitimate as the executive branch issuing them. To protect Afghanistan's disappearing forests, interim president Hamid Karzai issued a decree banning illegal logging, avoiding the procedures required by Afghan law for legal development, including public consultation (Bowling and Zaidi 2015). In adopting the decree, the interim administration failed to recognize that the national government had little public legitimacy and limited capacity to enforce the ban in the most heavily forested (and forest-dependent) region in the country. At the same time, tradition, economic need, and personal security concerns gave the population strong incentives not to comply. Complying with the ban would have required a large part of the population to forgo their primary source of income; it would also put them at risk of reprisal from the powerful groups that controlled the timber trade. Finally, many Afghans viewed the decree as an effort by a corrupt government to capture timber and use it for its own benefit. (Reports also surfaced of the Taliban selling timber to support its activities (Trofimov 2010)). The resulting (and foreseeable) noncompliance set an early and damaging precedent for restoring the rule of law in the country.

EIA laws

EIA laws seek to promote sustainability and preventive environmental management by ensuring that appropriate attention is paid to potential environmental impacts when decisions are made, before the impacts happen. EIAs enable states to identify environmental (and often social) impacts of the proposed project and its alternatives, determine appropriate mitigation measures, and engage stakeholders in permitting, licensing, and other decision-making processes (Colombo 1992). EIAs thereby weed out poorly performing companies, spread best practices, forge a common environmental vision, depoliticize environmental concerns, and provide a communication platform for various stakeholders (Brown et al. 2012).

EIAs are widely accepted and used as a foundation of sound environmental governance; accordingly, most countries—including Afghanistan, El Salvador, Sierra Leone, and many other conflict-affected states—have adopted EIA legislation. For example, since the early 1990s, Sierra Leone has enacted policies and statutes governing environmental assessment and planning. In 1995, Sierra Leone published its national environmental action plan; in 2000, it passed the Environmental Protection Act. The implementation for both efforts, however, was undermined by civil war. The national environmental action plan was published in the midst of the civil war, and the Environmental Protection Act was passed before the final peace agreement was concluded and post-conflict peacebuilding processes started. In 2008, as part of an effort to prioritize environmental assessments, Sierra Leone passed the 2008 Environmental Protection Act (amended in 2010), which devolved most responsibility for environmental management to

the Environment Protection Agency. UNEP then supported the agency's capacity building and implementation efforts (Brown et al. 2012).¹⁹

Pollution control laws

Pollution laws are intended to prevent and reduce the deterioration of air, water, and soil quality, and thereby prevent harm to human health and the environment. Examples from Iraq and Afghanistan offer contrasting approaches.

In Iraq, the Environment Protection and Improvement Law (Law No. 27 of 2009) requires noncomplying polluters to remove the source of pollution within ten days of notification. If the polluter does not comply, the Minister of Environment may shut down the polluter's operations for not more than thirty days, the polluter must pay a fine of at least 1 million dinars (US\$850) for each month until the source of pollution is removed, and the polluter may face imprisonment. This law has yet to be properly tested and implemented, however. Critics have argued that the law is overly aggressive, holding that enforcement will likely take the form of financial and smaller civil penalties for noncompliance, and reimbursements to the Ministry of Environment for its investigation costs (Donovan 2011).

In contrast, Afghanistan's Environmental Law (Law No. 912 of 2007) establishes a licensing procedure for polluting operations. No person may discharge or allow the discharge of a pollutant into the environment without a valid pollution control license. The NEPA can only grant licenses to operations that will not have a significant adverse effect, or whose adverse effects have been adequately mitigated.²⁰

Regional agreements

Post-conflict states negotiate and conclude transboundary environmental agreements for various reasons: to build confidence, foster cooperation, support economic recovery and political integration, and address transboundary disputes over natural resources.

In 1999, the countries of Bosnia and Herzegovina, Croatia, Serbia and Montenegro, and Slovenia established the International Sava River Basin Commission to implement the Framework Agreement on the Sava River Basin, a cooperative river basin management program. It is not an accident that the first agreement concluded by the former Yugoslav states focused on the Sava River. By the end of the wars that wracked the former Yugoslavia in the 1990s, the Sava River, the most important inland waterway in the former Yugoslavia, was

¹⁹ On support in developing Afghanistan's EIA law, see Bowling and Zaidi (2015).

²⁰ For the text of Afghanistan's 2007 Environmental Law, see www.afghan-web.com/environment/afghan_environment_law.html.

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heavily polluted by industry, agriculture, and wastewater (Čolakhodžić et al. 2014). While the commission can give only recommendations for nonnavigational issues,²¹ the commission has emerged as the single management authority over the Sava River; in 2013, it finalized the Sava River Basin Management Plan (ISRBC n.d.).²² By bringing together the riparian member states, many of which had been fighting one another, the commission has been able to foster open communication and encourage cooperation (Čolakhodžić et al. 2014).

Water is an area of cooperation in another conflict-affected region. The 1994 Treaty of Peace between the State of Israel and the Hashemite Kingdom of Jordan included commitments by both parties to share the Jordan River's water resources. Annex II, which focuses solely on water, allocates quantities of water to each country, with Israel giving Jordan 50 million cubic meters per year and Jordan owning 75 percent of the water in the Yarmouk River. The parties also agreed to protect the water resources by practicing good management of the resources, and Israel committed to assisting Jordan in the use of desalination technology. The Jordan-Israel peace treaty has endured through two decades of subsequent tensions in the region, demonstrating that countries can still respect their shared resources, even after years of conflict over the resource and continued difficulties between countries (Haddadin 2014; Mehyar et al. 2014).

POLICY ISSUES AND SOLUTIONS

In reforming and developing their environmental laws, post-conflict countries face several common policy issues. Six of the most common issues are (1) ownership of natural resources; (2) distribution of resources and their revenues; (3) institutional structure; (4) transparency, accountability, and public participation; (5) gender; and (6) sustainability. This section examines approaches to addressing these issues.

Ownership of natural resources

Ownership rights can pose a challenge in any sector, but ownership problems are particularly prevalent with regard to land. Unjust land tenure systems are often at the root of conflict (Unruh and Williams 2013a). In Angola, for example, the general population sympathized with nationalists who launched the liberation war because they had been disadvantaged by Angola's unjust land tenure system. In El Salvador, landless laborers organized resistance movements. Inequitable landownership regimes also result in disputes and relapses of violence (Corriveau-Bourque 2013). In Afghanistan, between 2002 and 2003, roughly 60 percent of returnees were landless (Elhawary and Pantuliano 2013). They returned to rural

²¹ The commission's navigational decisions are binding.

²² The commission intends to finalize an emergency management and flood plan in 2015.

areas, relying on land as a means of survival, but this resulted in conflicts with those who were already occupying the land.

Land reforms can occur in a variety of forms, such as state-compelled purchase and redistribution of private lands to local populations, or issuance of grants and loans to purchase land at voluntary sales (World Bank 2005). For many post-conflict areas, particularly those with indigenous populations, recognition of customary tenure is necessary to maintain peace (Unruh and Williams 2013b), as exemplified by the Mindanao region of the Philippines.

Both Mindanao's Muslim Moro and non-Muslim indigenous populations hold traditional claims to land dating from before Spanish and American colonizers forcibly removed them from their ancestral homelands (Oki 2013). Following independence in 1946, the central government displaced Muslim groups and took control of Mindanao's natural resources. In the 1970s, in response to these grievances, a group of Muslims formed the Moro National Liberation Front (MNLF), to demand greater autonomy for their ancestral homelands. Although the 1996 peace agreement between the MNLF and the government partially fulfilled demands for an autonomous Muslim area, violence has continued because of the dissatisfaction of the Moro Islamic Liberation Front, an offshoot of the MNLF. The resolution of the land issue in Mindanao has been complicated by an unclear legal regime comprising a combination of Islamic and secular laws. Although a memorandum of agreement on ancestral domain was set to be signed on August 4, 2008, the supreme court declared the agreement unconstitutional, and the long-standing land dispute remains unresolved (Defensor Knack 2013).

Distribution of resources and revenues

Inequitable access to and use of resources and distribution of resource revenues often drive or reignite conflict. Large reserves of oil and gas often fuel secessionist movements (Collier and Hoeffler 2012). In the Middle East, disputes over withdrawing water from the Jordan River were a factor in the 1967 war (Lukacs 1997). Incorporating resource sharing agreements into peacebuilding and developing appropriate legal frameworks, at both the interstate and intrastate levels, can alleviate tensions and promote long-term peace. Nonetheless, failures illustrate that interstate resource sharing agreements may lack sufficient enforcement mechanisms, and may fail to adequately address resource sharing. There are more successful examples of intrastate resource sharing.

Although Israel and Jordan negotiated the Wadi Araba Treaty, which equitably allocated water from the Jordan River, neither party has met all its commitments (Mehyar et al. 2014). Similarly, in December 2003, Sudan and the Sudan People's Liberation Army agreed that Southern Sudan would receive 50 percent of current oil revenues, but the negotiations failed to make provision for oil contracts that would come into effect only when a final peace agreement was signed; nor did the parties agree on a resource sharing process or standard (Johnson 2011).

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Effective management (and sharing) of natural resource revenues can address the natural resource–based financing schemes of armed groups; help formulate new governance arrangements; equalize the natural resource–related gains of each party; monitor wealth that could provide a source of financing for new conflict; and maintain peace and foster development by addressing disputes that fueled past conflict (Wennmann 2012). Countries emerging from conflict have at least three options for sharing natural resource revenues (Ross, Lujala, and Rustad 2012). First, a trust fund may be established with the central government, a subnational entity, or an independent organization as the trustee. Second, resource revenues can be directly distributed to the populace. And third, local governments may levy taxes, or may receive transfers of a portion of the revenues originating in the region.

Direct distribution can contribute to peacebuilding by fueling an investment in private goods, boosting the private economy when the public sector has yet to recover, bolstering public confidence in the government and the social contract by increasing transparency, and serving as a unifying force by distributing resource dividends equally across political and ethnic factions (Moss 2012). Direct distribution can also address the economic causes of conflict by alleviating poverty, ameliorating poor government spending choices, and uprooting central government corruption. Direct distribution of resource revenues does not, however, contribute to long-term improvements in governance the way distribution through local government can. And, while distribution through local government may be susceptible to incapacity or corruption, it can be more effective when accompanied by a decentralization effort. In addition, transparency initiatives such as the Extractive Industries Transparency Initiative can help to counteract this threat.

Institutional structure

Laws assign responsibility for carrying out their requirements. In developing new law, lawmakers must decide which institution or institutions have the capacity, knowledge, legitimacy, and transparency to best carry out the mandate.²³ Management authority may be delegated to one institution or shared among numerous institutions, vertically (from the national level to the district, provincial, or local level) or horizontally (across sectors). This subsection considers three broad institutional arrangements for allocating responsibility for managing natural resources: horizontal power sharing, vertical power sharing (including decentralization and federalism), and legal pluralism.

²³ Among other policy issues are the following: to whom natural resource rights should be granted; whether the state recognizes customary access regimes for minerals and other high-value resources; whether access is controlled through a contracting or permitting process; on what terms rights to high-value resources are granted; the geographic extent of the grants; what standards apply to the grants; how consideration of large-scale mining and artisanal mining should be balanced; and whether smallholder farming should be favored over large-scale agriculture.

Horizontal power sharing

Horizontal power sharing seeks to enhance institutional performance and accountability, as each agency asserts its power and tries to prevent other agencies from overstepping their authority. This arrangement has the added benefit of being able to bring different disciplines to bear on intersectoral issues.

Since 2006, Liberia has implemented a horizontally shared governance system for forestry management as a strategy to address historic agency corruption. Before 2006, the Liberian government and the Forestry Development Authority (FDA) actively exploited the country's timber resources, but the FDA did not collect taxes and fees transparently and could not account for the revenues, leaving the Liberian government and the Liberian people without benefits (Blundell 2003). As part of its forest reform process—codified in the 2006 National Forest Reform Law—Liberia allocated forestry management authority to both the FDA and the Environmental Protection Agency (EPA) (Altman, Nichols, and Woods 2012).²⁴ No logging may be permitted by FDA until the EPA grants an EIA certification. Logging contracts issued without a valid EIA must be canceled.²⁵ As the EPA is still young, however, it has limited capacity to ensure enforce these provisions.

Vertical power sharing

Vertical power sharing among different levels of government works well when there is a particular need for institutions that reflect an understanding of the local context. Decentralization of authority encourages public participation, information sharing, and better decision making. Federal arrangements—generally enshrined in a nation's constitution—recognize the independent authority of subnational institutions. Often, local institutions are awarded greater legitimacy by the regulated community, which can increase compliance (Kauzya 2005). In some circumstances, though, a more centralized approach is necessary—for example, to capitalize on economies of scale, as in the case of Japanese flood management, discussed later in the chapter. Whether regulatory authority over natural resources is by national policy or constitutional law, good governance is essential to ensure that localizing decision making does not merely localize corruption.

Decentralization. Decentralization implements the principle of subsidiarity, whereby authority is located with the most local institution competent to handle the task (Ribot 2002). Decentralization via policy or legislative reforms can authorize subnational authorities to make executive, legislative, or judicial decisions.

²⁴ The Liberian government established the EPA in 2003.

²⁵ In addition to competing for authority and power, the EPA and FDA also cooperate on environmental initiatives, such as cochairing the Reducing Emissions from Deforestation and Degradation (REDD) program (Republic of Liberia 2008).

This distribution of authority can enable local institutions to act while the national government is incapacitated. In Afghanistan, while interministerial disputes have slowed progress on governance and maintenance of essential irrigation infrastructure (Bowling and Zaidi 2015), local irrigation institutions have continued to effectively administer the irrigation canal system (Roe 2009).

By sharing governance responsibility over natural resources instead of isolating power within one governing body, decentralization can provide a platform for sustainable democratization, economic development, reconciliation, and social integration, strengthening both local and central governments. In Sierra Leone, with the advent of a localized permitting process for artisanal mining, compliance and enforcement of mining controls greatly increased (Coakley 2004).

In the Philippines, two efforts on the island of Mindanao illustrate both the potential of decentralization and the fact that without support from all relevant sectors, it cannot succeed. Starting in 2001, the Philippine Environmental Governance Project played two roles. First, it worked with local governments on Mindanao to increase their authority over—and their role in protecting—natural resources (Brady et al. 2015). Second, the project built capacity to resolve conflicts under the auspices of the Municipal Environment and Natural Resources Council.²⁶ Through this project, local governments have collaborated with rebel groups to develop forest land use plans and enact forestry and coastal resource management ordinances.

In contrast to collaboration around forestry and fishery resources, incorporating local voices into mining decisions in Mindanao has been less successful, due to the resistance of key stakeholders (Oki 2013). Under the Indigenous Peoples Rights Act, where mining has been proposed for areas that include the ancestral domains of an indigenous community,²⁷ the National Commission on Indigenous Peoples (NCIP), which protects the rights of indigenous peoples, requires the free, prior, and informed consent of all members of an indigenous cultural community as a precondition for mining. However, foreign mining companies persuaded the NCIP to weaken its provisions for consent, hindering the decentralization of mining rules (Holden, Nadeau, and Jacobson 2011). It has also been reported that the mining companies have paid protection money to rebel groups to be able to operate (Oki 2013).

Decentralized institutional arrangements are less effective when the local institutions lack the necessary technical skills or financial resources. In Japan,

²⁶ In Illana Bay, local governments from across the bay created an alliance called the Illana Bay Regional Alliance to conserve, develop, and manage the Illana Bay fishing area. The alliance developed coastal resource management practices, and the dialogue among the member local governments led to resolution of disputes between previously conflicting groups. This collaboration led to improved enforcement of fishery restrictions, reducing a major source of conflict (Brady et al. 2015).

²⁷ *Ancestral domain* refers to land formerly owned by the descendants of Islamic sultanates or families of Islamic sultanate origin (Oki 2013).

prior to World War II, local water associations administered both irrigation and flood management (Sugiura, Toguchi, and Funicello 2014). Following World War II, water and flood management infrastructure was largely destroyed or abandoned, resulting in acute water shortages and serious flood damage. Frequent flooding took more than 1,000 lives per year. Solving this problem would require substantial investment in large infrastructure projects. The central government could conduct these projects more effectively than the local water associations, so a series of laws was passed centralizing flood control.

Similarly, decentralizing authority may not be effective when pre-war power structures continue unchanged. Central governments often resist the decentralization of natural resource management in order to maintain control over a source of wealth and patronage. As noted earlier, the Sierra Leone DACDF was designed to equitably distribute the benefits of diamond extraction to the chiefdoms of the producing regions and strengthen citizen participation in natural resource decision making (Maconachie 2012). While the Ministry of Mineral Resources (MMR) created chiefdom development committees (CDCs) to ensure that the chiefdoms carried out DACDF projects equitably and accountably, chiefs and their confederates continued to control decision making, and many community stakeholders remained marginalized. In response, the MMR adopted measures to monitor CDCs and required additional information for a CDC to receive funding, including information documenting that a CDC elects chiefdom project committees.

This experience highlights the risks of using decentralization structures as a tool to appease potential peace spoilers. More generally, in any decentralization effort, it is necessary to have a realistic understanding of the power dynamics between the political center and regional actors. In cases where the central government lacks the capacity or legitimacy to establish and enforce standards, local or provincial authorities may be better positioned to do so. At the same time, the long-term prospects for success in such a system may depend on partial decentralization, in which national institutions retain some supervisory authority to ensure coherence and consistency with national policies.

Federalism. Under federalism, power is shared between national and subnational institutions, with each having core authority for certain issues. In this arrangement, the diverse institutions must coordinate with one another in order for the body politic to function (Elazar 1995). When local populations view their government as illegitimate and inept, federalism has had limited success, as demonstrated by Ethiopia's federalism model.

Following a drawn out civil war (1975–1991), the newly appointed Ethiopian People's Revolutionary Democratic Front (EPRDF) created ethnically based states, giving Ethiopia's ethnic groups management authority over their natural resources in addition to the full expression of their languages and cultures (Roeder and Rothchild 2005). Access to and application of greater local knowledge has contributed to new and more integrated conservation farming practices for nonirrigated areas, such as in the state of Tigray (Keeley and Scoones 2003).

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With Ethiopia's history of authoritarianism, hierarchy, and centralized rule, however, some ethnic groups find it difficult to maintain control over their natural resources. In the Southern Nations, Nationalities, and People's Region (SNNPR), the federal government strictly controls natural resource management because—it is asserted—SNNPR leaders do not have connections to the government, are uneducated, and lack support from local people (Keeley and Scoones 2003). Federalism can only be successful if the subnational institutions maintain political support and force. Capacity building at the subnational level can increase the effectiveness of federal approaches.

In contrast, in Nepal, the community forest user groups (CFUGs) that manage forests exemplify a successful federalist model (Sanio and Chapagain 2012).²⁸ CFUGs exist alongside village development committees (VDCs), local government units that provide official communications to higher levels of government. CFUGs manage forests through traditional practices, collect revenues, resolve local conflict, and allocate available funds. They have improved the condition of the forests and generated resources for local development. The success of CFUGs can be attributed to their flexibility, responsiveness, and community participation.

Legal pluralism

Legal pluralism is the coexistence of overlapping laws within one geographic area, potentially including international, state, local, customary, religious, or project laws.²⁹ In the post-conflict context, the state often has limited capacity to implement or enforce laws outside the capital, due to limited legitimacy as well as to monetary, security, and staffing constraints. Through legal pluralism, however, governments can address gaps created by a functional absence of the government in specific geographic areas, as well as the need to address urgent problems (for example, resolving conflicts over landownership). Traditional and statutory laws often conflict, however, because customary laws are intended to meet community needs, which may not align with modern natural resources policy (Meinzen-Dick and Pradhan 2002). Rights and obligations related to land tenure, for example, tend to shift during armed conflict due to population changes, reduced state capacity to govern, identity changes, and legitimacy (Unruh 2003).

During a peace process, national and international challenges focus on resolving the ambiguities and tensions created by legal pluralism governing land

²⁸ CFUGs are not customary institutions. They were developed as part of a long-term project. They supported local communities well before the civil war (1996–2006), and gained national support throughout the war as they continued to deliver community services and maintained their neutrality.

²⁹ On legal pluralism and post-conflict peacebuilding, see Ruth Meinzen-Dick and Rajendra Pradhan, "Property Rights and Legal Pluralism in Post-Conflict Environments: Problem or Opportunity for Natural Resource Management?" in this book.

resources without spoiling the peace. Although legal pluralism creates some confusion, it provides useful flexibility and adaptive responses to ecological, livelihood, knowledge, and social and political uncertainties—all of which can be present in post-conflict societies.³⁰

Using a multiplicity of legal systems can foster effective natural resource governance. After the conflict that led to Timor-Leste's eventual independence from Indonesia, the new Timorese government lacked capacity to regulate natural resources and restore the degraded environment (Miyazawa 2013). The government formally recognized the authority of traditional leaders and customary practices to govern natural resource use, and was thus able to rein in uncontrolled extraction.

Transparency, accountability, and participation

Lack of transparency and accountability, and the exclusion of the public from natural resource–related decisions often lead to conflict, especially where communities depend on natural resources for their livelihoods and well-being. For example, in 2005, when a mining company, Montana Exploradora de Guatemala S.A., developed the Marlin mine, in the western highlands of Guatemala, it failed to meaningfully consult the eighteen affected indigenous communities regarding environmental and social impacts. This led to unnecessary tensions, violence against the communities, and intervention by the Inter-American Commission for Human Rights—all of which delayed the project, increased its cost, and undermined government legitimacy (Boege and Franks 2012).

Public consultation in the development of natural resource legislation is increasingly common, but it is particularly important in post-conflict countries where government capacity and legitimacy are limited. In Liberia, as noted earlier, the Liberian Forest Initiative undertook public vetting of work plans, engaged in public awareness campaigns, and implemented a formal notice-and-comment period for drafts of the initial ten regulations implementing the 2006 National Forestry Reform Law (Nichols and Goldman 2011). The FDA received hundreds of written and oral comments, which informed the final regulations that were approved by the FDA Board on September 11, 2007. A community-based approach to natural resource management was proposed in Afghanistan, although it was ultimately rejected by the Ministry of Justice (Bowling and Zaidi 2015). Some states incorporate public participation in decision making as a constitutional right, including Kosovo: article 52 of Kosovo's constitution states that “[e]veryone should be provided an opportunity to be heard by public institutions and have their opinions considered on issues that impact the environment in which they live.”

Stakeholder consultation has many benefits, including (1) improving long-term legitimacy; (2) bringing added knowledge to the process; and (3) building

³⁰ Meinzen-Dick and Pradhan, in this book.

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trust among stakeholders (Carius and Maas 2012). UNEP has conducted more than twenty post-conflict environmental assessments, and the most successful were those that involved national experts in the process and included large public consultation and validation workshops (Jensen 2012). In Sierra Leone, establishment of the DACDF for local diamondiferous communities has changed the way that communities view government involvement in the management of minerals: once the benefits to the communities became more clear, residents viewed the government as more legitimate (NRGI n.d.).

Post-conflict countries have also enhanced transparency and accountability by making government documents and records publicly available, establishing public notice-and-comment procedures, and bringing stakeholders to the table in decision-making processes. For example, Liberia's 2006 National Forestry Reform Law (1) requires timber companies to disclose their corporate structure and financial and technical capacities; (2) incorporates freedom of information requirements; and (3) mandates the government to closely monitor timber payments (Altman, Nichols, and Woods 2012). On the other hand, the Liberia forest sector is also an example of a case in which the democratic process and the history of a conflict can result in outcomes that potentially impair the prospects for transparency. During the public participation process after the drafting of the law, civil society groups insisted on having both the president and the legislature approve all forest contracts as a check on executive power. The drafters of the law believed that this was an administrative redundancy—that by passing the law on the contracting process, the legislature had had its say—and that the lack of transparency and the chance for each legislator to stop a given contract was an invitation to corruption.³¹ Subsequently, there were several cases in which the legislature held up contracts; there have also been accusations of corruption and fraud at this stage.

Other post-conflict countries have established procedural rights, such as the right to information. For example, article 39 of the constitution of Chechnya states that “[e]veryone has the right to favorable environmental surroundings [and] reliable information about its condition. . . .” Other constitutions guarantee access to information.³²

Transparency and accountability can increase revenues from natural resource extraction, as more resource fees and other revenues accrue to state coffers rather than being diverted to the informal market and private accounts (Lujala, Rustad, and Le Billon 2010). Transparency and accountability can also help to ensure that revenues from natural resources are spent in ways that promote development

³¹ Personal communication, Bruce Myers, senior attorney, Environmental Law Institute, March 29, 2010.

³² The constitutions of Afghanistan, Algeria, Armenia, Burundi, Cambodia, Chad, Colombia, Congo, Democratic Republic of the Congo, Iraq, Kosovo, Mozambique, Palestine, Panama, Rwanda, Senegal, Somalia, South Sudan, Sudan, Tajikistan, and Uganda also guarantee access to information.

for the country as whole, rather than benefiting privileged groups. Moreover, improving transparency of revenue flows and including local populations in decision-making processes can begin to rebuild trust between people and the state, which often erodes during conflict (Rich and Warner 2012).

Gender

Conflict engages and affects men and women in quite different ways. Women often have primary responsibilities over household activities such as the management of water and sanitation, firewood collection, and food provision, giving women a deep understanding of the local environment.³³ Due to traditional power structures and gender relations, however, women are rarely sufficiently involved in decision-making processes regarding natural resources.

Attention to gender issues is especially important in land reform. Conflict disrupts traditional land tenure practices: men leave to fight, leaving women to function as the heads of the households. When displaced women attempt to return after conflict, however, they are often unsuccessful, because women often are not legally permitted to own land and cannot produce documents showing formal title to property (Dokmanovic 2002).

Several post-conflict countries—including Burundi, Tanzania, Uganda, and Zimbabwe—have reformed their land policies to address gender issues. In article 17 of the Burundi Constitutional Act of Transition, men and women are equal before the law. Under Burundi's 1993 Amendment of the Code of the Person and Family, a wife has the right to joint management of the family property if the husband is absent (Kamungi, Oketch, and Huggins 2005). However, customary practices inhibit women from benefiting from these statutory rights. Women still have to contend with male relatives if the spouse is absent, and they are expected to provide for the family while not being able to use the land productively.³⁴ Similarly, in Tanzania and Uganda, land policies require gender neutrality in marital property ownership, but social and cultural practices hinder equality in land tenure. The combination of traditional norms, inaccessible courts, and uninformed women slows the implementation of gender-equitable land approaches.

³³ Njeri Karuru and Louise H. Yeung, "Integrating Gender into Post-Conflict Natural Resource Management," in this book.

³⁴ For a discussion of the natural resource-related challenges women face in Zimbabwe, see Karuru and Yeung, in this book. While Zimbabwe's judicial system recognizes both the European statutory approach and customary law, women often cannot functionally own property because customary law is applied. In the 1999 case of *Magaya v. Magaya*, a deceased man's eldest daughter, who had resided in the man's house before and after his death, was denied inheritance to his property; instead, ownership was given to the son from the man's second wife. Because the second marriage had been established under customary law, the court settled the dispute under customary law, in which "males are preferred to females as heirs."

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Dynamics surrounding land rights is not the only natural resource–related matter that renders women and girls more vulnerable. When retrieving water and firewood—traditional tasks of women and girls in many countries—women and girls risk injury or death from landmines, as well as assault or rape, especially during and after conflict in areas with increased soldier presence. Women also play a large role in labor reforms. During combat, many women are employed in roles that are traditionally filled by men, and in doing so they hone valuable skill sets. Following conflict, men return, displacing women from their positions. In Nicaragua, 16,000 women lost their jobs to returning male excombatants (Zuckerman, Dennis, and Greenberg 2007). By considering gender roles in decision making, post-conflict countries can capitalize on women as a component of the formal workforce, address gender inequalities, and reduce the stress on natural resources.

Sustainability

Planning for long-term peace requires post-conflict countries to develop long-term solutions and incorporate sustainability analyses into their legal frameworks. To maintain peace and stability, post-conflict countries must ensure that citizens have sustainable livelihoods, which may be based on either renewable or nonrenewable natural resources. Renewable resources can be used in ways that make them available to future generations. Post-conflict governments and societies, however, often severely deplete renewable resources, extracting them at a rate exceeding their rate of replacement. Governments must find ways to use renewable natural resources to meet current needs, without sacrificing the ability to continue to depend on those resources in the future.

On the other hand, nonrenewable resources are by definition exhaustible. While the natural resource itself may not be available for future populations, nations can establish a trust fund or other mechanism for sharing the benefits of the country's natural patrimony with future generations. In Chad, the Petroleum Revenue Management Law established the Future Generations Fund to redistribute money from the current generation to later generations that would inherit a Chad drained of oil. Fund distributions, however, have not been properly policed or monitored. While the World Bank helped Chad create a body to police the distributions, Chadian president Idriss Déby and his patronage network asserted control of the fund, as the government did not have the necessary checks and balances firmly in place (Gould and Winters 2012). President Déby called for the release of the Future Generations Fund and its ultimate elimination. Chad's experience with the Future Generations Fund highlights the importance of governance and political will in general; in the specific context of natural resource revenue management, it highlights the importance of having the necessary laws, institutions, and capacities firmly in place before revenues start flowing from large-scale extraction.

CONCLUSION

Because of the intricate nature of the links between natural resources and other aspects of life in post-conflict societies, natural resource reform processes provide an enormous opportunity to promote good governance by addressing lawlessness, rebuilding trust, and increasing government legitimacy. This chapter identifies several substantive and procedural dimensions for developing and reforming environmental law in post-conflict countries.

Many instruments are available to establish an environmental legal framework or to be incorporated into an existing framework in post-conflict areas. A government can prioritize the environment and memorialize its commitment by establishing environmental rights. Natural resources can be protected through specific natural resource legislation, EIA laws, and pollution control laws. Through environmental framework laws, governments can delegate management authority to a range of institutions. Governments can act quickly through executive decrees. Finally, regulations can be passed to implement environmental law frameworks or provide greater guidance to environmental agencies. Timely, complete, and comprehensive assessments guide governments in selecting which legal instruments are needed most and how they should be framed.

In developing a legal framework, policy makers need to place the framework in context, shaping the environmental laws to meet the social, political, and economic constraints of the specific post-conflict context. Otherwise, newly developed laws and regulations may not function effectively and may ultimately fail, wasting resources and opportunities.

Changes in legal frameworks are not a panacea. Laws are the rules that governments use to regulate activities in a society, but it is increasingly recognized that in order for laws to be respected and for rule of law to be achieved, the laws must be accepted as legitimate by the regulated population. This means that law is not the mechanism for making change, but is one of a set of tools that contributes to a process of change. This is particularly true with respect to natural resources in post-conflict settings. In conflict-affected countries, natural resources are pivotal to conflict and to its resolution in numerous ways. This chapter describes how legal reform can contribute to improved natural resource laws, institutions, and practices—that is, governance—and thus to post-conflict peacebuilding.

While legal reform is often key to improving the environmental management or addressing a natural resource issue, it is essential to avoid focusing on legal reform to the exclusion of other components of a reform effort. Too often, financial and technical resources are devoted to this process, without recognizing that it is only an early or intermediate step, and substantial follow-on is needed. In addition to the various mechanisms for introducing reforms, a few big-picture considerations are essential to understanding the role and limitations of legal reform in post-conflict natural resource management.

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Writing laws is a relatively straightforward activity. It appeals to donors as a discrete activity with a clear output. Governments may concede that a new law or legal instrument is needed, since allowing an outside expert to carry out the process of drafting a new law generally does not require much change in how they conduct their affairs. This is a far cry from a genuine decision to make changes necessary to address a specific problem. Meaningful reform cannot be driven externally, no matter how technically deft or innovative the ultimate legal document.

Legal reform can provide a procedural framework to shape and direct a reform, but it cannot be the ultimate objective. To successfully employ legal reform as part of a broader post-conflict reform effort, it is essential to first identify the objectives for the reform, and then to build consensus about how to achieve them.

Technical capacity to assess the problems, identify solutions, and implement reforms is fundamental to the success of a change strategy. If the process is designed without meaningful stakeholder engagement, it risks producing an illegitimate result that will not be effective.

Expectations have an enormous effect on acceptance of a reform. An effectively reformed law can serve as a starting point for improved collection and management of natural resource revenues (transforming an economy) or more equitable allocation of natural resources and their revenues (redressing historical discrimination), but implementing reforms takes much more than passing a new law. Elevated expectations can lead to disillusionment when results are not achieved when expected, undermining the reform effort. Whether expectations are disappointed or satisfied is more determinative of social acceptance of a new policy than the actual degree of change or level of resources brought to bear on problem (Moffat and Zhang 2014).

In post-conflict countries, as in many developing countries that have been affected by conflict, the lack of coordination among government agencies is often a disabling challenge. Bloated bureaucracies, limited communications technology, and other structural problems limit coordination, as do social or cultural factors such as a paternalistic or authoritarian undercurrent. As a result, technical staff often receive orders that are disconnected from on-the-ground activities, needs, or capacities, and information about technical activities often are not communicated to decisionmakers. Similar communication failures result in disconnect with sub-national government entities. Communications are particularly complicated with respect to natural resource-related issues, since they usually cut across sectors and must be coordinated across government entities.

While the impediments are staggering, the number of success stories is rapidly growing. With a better understanding of the peacebuilding dynamics associated with reforming environmental and natural resources laws, those with the will for change will be better equipped to succeed.

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