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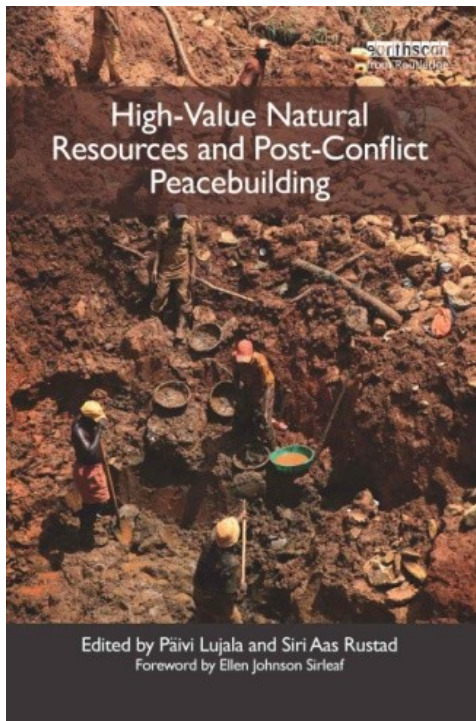
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High-value natural resources: A blessing or a curse for peace?

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High-value natural resources: A blessing or a curse for peace?

Päivi Lujala and Siri Aas Rustad

High-value natural resources have the potential to promote and consolidate peace. Too often, however, they make the path to sustainable peace long and hazardous. Valuable resources can help to jump-start development, secure sustained growth, raise living standards, and increase economic equality. They are also an important source of foreign currency for cash-strapped governments, can reduce dependence on international aid, and can support compensation and post-conflict relief for war-affected populations. But the promise of a brighter and more peaceful future is often spoiled by deep-rooted corruption and patronage, which confer benefits on small groups rather than on the population as a whole, and by shortsighted management of the resources and the revenues they generate.¹ In addition, the mere presence of high-value resources can jeopardize peace, if the resources become the focus of violent disputes or provide financing for groups that seek to ignite (or resume) armed conflict.

In many post-conflict countries, revenues from high-value natural resources—such as oil, natural gas, minerals, gemstones, and timber—are an integral (and even dominant) part of the national economy and state budget. In post-conflict Algeria, Angola, and Sudan, for example, oil and gas account for more than 60 percent of government revenues and over 90 percent of all export revenues (see figure 1). In Sierra Leone, in the wake of a brutal civil war that ended in 2002, diamonds accounted for 96 percent of all exports (IMF 2009b). And in Chad, Iraq, Libya, and Nigeria—all of which were affected by armed conflict during the early years of the twenty-first century—oil and gas account for as much as 70 percent of gross domestic product and more than 80 percent of government revenues. In

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¹ Although many patronage systems are corrupt, the phenomenon of patronage is distinct from that of corruption.

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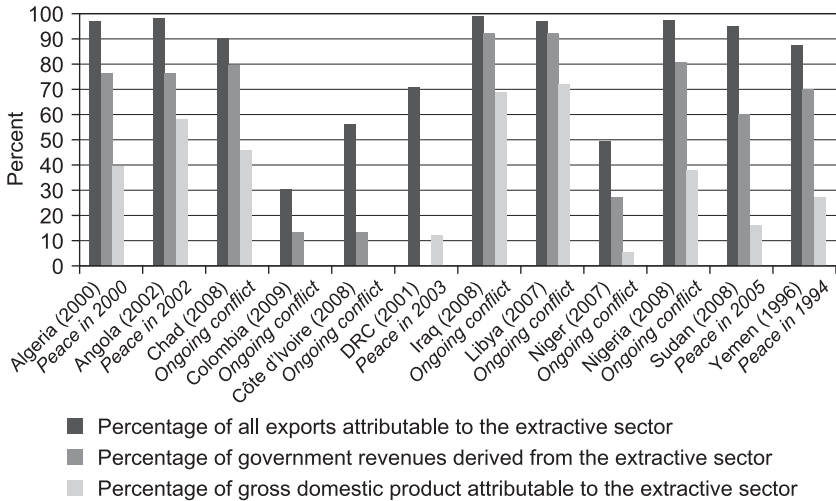


Figure 1. The economic role of the extractive sector in selected post-conflict and conflict-affected countries

Sources: End dates for conflict: Gleditsch et al. (2002); Harbom and Wallensteen (2010). All other data: IMF (2001, 2005, 2007, 2008, 2009a, 2010b, 2010c, 2010d, 2010e, 2011a, 2011b, 2011c).

Notes:

1. Numbers in parentheses indicate the year for which the data were obtained.
2. Where there are two columns instead of three, the data for the third column were unavailable.
3. For post-conflict countries, data were obtained for the year following the end of hostilities or for the first year for which they were available. (In some cases, conflict reignited after the period included in the figure.) For conflict-affected countries, the data are for the latest year for which they were available.
4. Country data reflect various resource sectors, as follows: Algeria, oil and gas; Angola, oil, gas, and diamonds; Chad, Colombia, Libya, Nigeria, Sudan, and Yemen, oil and gas; Côte d'Ivoire, oil, gas, and coffee; the Democratic Republic of the Congo (DRC), mining; Iraq, oil and gas. For Niger, export share data are based on uranium and gold, government revenues data are based on uranium, and gross domestic product data are based on mining.

Niger, uranium and gold are important revenue sources (IMF 2009a), as are oil, cocoa, and coffee in Côte d'Ivoire (IMF 2010d), and diamonds and timber in the Central African Republic (IMF 2010a). In Burma in 2008–2009, gas exports made up one-quarter of all exports; forest products and gemstones were other important exports (Turnell 2010; Talbott, Akimoto, and Cuskelly 2012).

When peace comes, the revenues from high-value natural resources—when managed well—can help finance reconstruction and other vital peace-related needs. When mismanaged, however, resource revenues can undermine both economic performance and the quality of governance, and thereby increase the risk of renewed violence.

Recent high-profile reports by the UN Secretary-General, the World Bank, the UN Environment Programme, and the United Nations have highlighted the need to more effectively harness high-value natural resources for development and peacebuilding (see sidebar) (UNSG 2009, 2010; World Bank 2011; UNEP 2009; UN 2011). If managed effectively, high-value natural resources constitute substantial

assets that national and international actors can use to support core peacebuilding objectives, including macroeconomic recovery, livelihood generation and support, the reform of governance and political processes, and improved security.²

The fact that so many resource-rich countries are unable to achieve long-term peace, however, raises some difficult questions about how high-value resources should be managed in post-conflict settings. How can post-conflict governments cut through corruption and patronage and reform their extractive sectors? How can leaders who are more interested in personal benefit than in improving the lives of their citizens be reined in? How can post-conflict governments make the best use of the potential created by foreign direct investment? What responsibilities do extractive industries have in post-conflict countries? How can the environmental effects of resource extraction be minimized? How can a balance be struck between large-scale production, which can provide considerable revenues for the state, and small-scale and artisanal production, which may be the backbone of local livelihoods? How can illegal extraction be curtailed without damaging livelihoods? How can one ensure that revenues are used to advance long-term development objectives? How should potential peace spoilers be dealt with?

The goal of this volume is to provide insight into these and similar questions—for the benefit of national and local governments,

**Post-conflict peacebuilding and natural resources:
Key terms and concepts**

Following conflict, peacebuilding actors leverage a country's available assets (including natural resources) to transform the country, with the aim of achieving security, service, economic, and governance objectives. Peacebuilding actors work at the international, national, and subnational levels, and include national and subnational government bodies; United Nations agencies and other international organizations; international and domestic nongovernmental organizations; the private sector; and the media. Each group of peacebuilding actors deploys its own tools, and there are a growing number of tools to integrate the peacebuilding efforts of different types of actors.

A post-conflict period typically begins after a peace agreement or military victory. Because a post-conflict period is often characterized by intermittent violence and instability, it can be difficult to pinpoint when the post-conflict period ends. For the purposes of this book, the post-conflict period may be said to end when political, security, and economic discourse and actions no longer revolve around armed conflict or the impacts of conflict, but focus instead on standard development objectives. Within the post-conflict period, the first two years are referred to as the *immediate aftermath of conflict* (UNSG 2009), which is followed by a period known as *peace consolidation*.

According to the United Nations, "Peacebuilding involves a range of measures targeted to reduce the risk of lapsing or relapsing into conflict by strengthening national capacities at all levels for conflict management, and to lay the foundations for sustainable peace and development" (UNSG's Policy Committee 2007). In many instances, this means addressing the root causes of the conflict.

There are many challenges to peacebuilding: insecurity, ethnic and political polarization (as well as marginalization), corruption, lack of governmental legitimacy, extensive displacement, and loss of property. To address these and other challenges, peacebuilding actors undertake diverse activities that advance four broad peacebuilding objectives:

- *Establishing security*, which encompasses basic safety and civilian protection; security sector reform; disarmament, demobilization, and reintegration; and demining

Cont'd on page 6

² The conceptual framework adopted in this book draws substantially from the *Report of the Secretary-General on Peacebuilding in the Immediate Aftermath of Conflict* (UNSG 2009), but the activities have been regrouped and supplemented by activities articulated in USIP and U.S. Army PKSOI (2009), Sphere Project (2004), and UN (2011).

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Post-conflict peacebuilding and natural resources: Key terms and concepts (cont'd)

- *Delivering basic services*, including water, sanitation, waste management, and energy, as well as health care and primary education
- *Restoring the economy and livelihoods*, which includes repairing and constructing infrastructure and public works
- *Rebuilding governance and inclusive political processes*, which encompasses dialogue and reconciliation processes, rule of law, core government functions, transitional justice, and electoral processes.

Although they are sometimes regarded as distinct from peacebuilding, both peacemaking (the negotiation and conclusion of peace agreements) and humanitarian assistance are relevant to peacebuilding, as they can profoundly influence the options for post-conflict programming. Peacemaking and humanitarian assistance are also relevant to this book, in that they often have substantial natural resource dimensions.

Successful peacebuilding is a transformative process in which the country and the international community seek to address past wrongs and proactively lay the foundation for a lasting peace. As part of this process, peacebuilding actors seek to manage the country's assets—as well as whatever international assistance may be available—to ensure security, provide basic services, rebuild the economy and livelihoods, and restore governance. The assets of a post-conflict country include natural resources; infrastructure; and human, social, and financial capital. Natural resources comprise land, water, and other renewable resources, as well as extractive resources such as oil, gas, and minerals. The rest of the book explores the many ways in which natural resources affect peacebuilding.

national and transnational civil society organizations, extractive industries, and the international community. To this end, policy makers, field researchers and practitioners, and scholars—all of whom have close knowledge of the issues at hand—have been asked to share their views on the challenges associated with the management of high-value resources in post-conflict and conflict-affected countries.

FROM POTENTIAL PROSPERITY TO CONFLICT: WHAT GOES WRONG?

High-value natural resources have been associated with dozens of armed conflicts, millions of deaths, and the collapse of several peace processes—and case study and statistical evidence confirms that such resources play a role in sparking and fuelling armed civil conflict.³ According to data gathered by Siri Aas Rustad and Helga Malmin Binningsbø, between 1970 and 2008 the portion of armed civil conflicts

³ For the purposes of this chapter, the term *armed civil conflict* refers to both internal and internationalized internal conflicts included in the Uppsala Conflict Data Program/Peace Research Institute Oslo (UCDP/PRIO) Armed Conflict Dataset. According to the UCDP/PRIO data set (Gleditsch et al. 2002; Harbom and Wallensteen 2009), from 1989 to 2008 there were only eight armed conflicts between independent countries, including Pakistan and India (1989–2003); the Iraqi invasion of Kuwait (1990–1991); Ecuador and Peru (1995); and the invasion of Iraq by a coalition led by the United States and the United Kingdom (2003). During the same period, more than 120 internal conflicts occurred, although some of these were internationalized in the sense that other countries provided military support for the government or for the rebels (Gleditsch et al. 2002; Harbom and Wallensteen 2010). Examples of internationalized internal conflict include the conflicts in the Balkans (1991–2001), Afghanistan (2001–present), Iraq (2004–present), and the Democratic Republic of the Congo (1996–2001). The preponderance of internal conflicts is reflected in this volume, which focuses on resource management in the wake of such conflicts. Among the issues not addressed in this volume, for example, is the joint management of resources that straddle national borders.

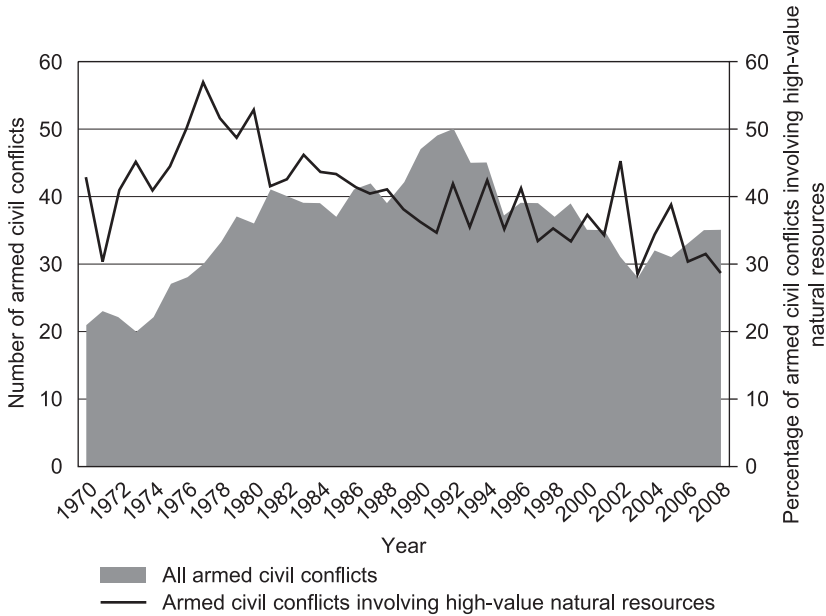


Figure 2. Armed civil conflicts involving high-value natural resources, 1970–2008

Sources: Conflict data: Gleditsch et al. (2002); Harbom and Wallensteen (2007, 2009). Resource data: Rustad and Binningsbø (2010).

Notes: The Uppsala Conflict Data Program/Peace Research Institute Oslo Armed Conflict Dataset defines *conflict* as an armed contestation between the government in a country and a rebel organization in which more than twenty-five battle-related deaths occur (Gleditsch et al. 2002). The figure includes all armed civil conflicts active from 1970 to 2008.

that were related, in some way, to high-value natural resources ranged from 29 to 57 percent (see figure 2) (Rustad and Binningsbø 2010).

Why is peace so difficult to achieve and sustain in the presence of these resources?⁴ High-value natural resources increase the risk of conflict in a number of ways. The risk of conflict can be directly increased when access to revenues motivates or finances belligerent movements, or when grievances are created (1) by unmet expectations or inequalities in the distribution of revenues, jobs, and other benefits, or (2) by the negative side effects of resource exploitation. The risk of conflict can be indirectly increased when resource sectors undermine economic performance and the quality of institutions. Thus, the three main avenues that lead from natural resources to armed conflict are resource capture, resource-related grievances, and adverse effects on the economy and institutions.

⁴ In a later chapter in this volume, “High-Value Natural Resources, Development, and Conflict: Channels of Causation,” Paul Collier and Anke Hoefler consider the links between conflict and high-value natural resources in more detail.

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Paul Collier and Anke Hoeffler (2004, 2006) and Päivi Lujala (2010) suggest that the capture of resources for personal or regional enrichment is a possible motivation for rebel uprisings and violent secessionist movements.⁵ Although resource capture can be one of the goals of armed rebellion, it is rarely, if ever, the sole motivation for conflict. Even in Sierra Leone, where the Revolutionary United Front has been represented as the classic example of a predatory, greed-driven movement, the reality is far more complex.⁶ More often, resource capture is a means of financing warfare and attracting supporters. For example, the Revolutionary Armed Forces of Colombia (Fuerzas Armadas Revolucionarias de Colombia, or *FARC*) has relied on kidnapping and drugs to finance its insurgency for decades. As efforts to curtail *FARC*'s access to income from these activities have met with some success, *FARC* has turned to gold mining to support its violent campaign against the government (*Economist* 2011; *New York Times* 2011).

Grievances can motivate armed conflict, particularly when the parties to a resource-related dispute are divided along ethnic, religious, or other lines. Among the events that may spark violent uprisings are land appropriation, environmental degradation, population displacement, large inflows of migrants, and frustration over unfulfilled economic expectations. Examples of grievance-based conflicts include Aceh, in Indonesia; Bougainville, in Papua New Guinea; Kurdistan, in Iraq; northern Niger; and southern Sudan. Grievances do not necessarily arise in the context of potential regional autonomy, as was the case in Aceh and southern Sudan; they may also occur in response to the abuse of power by local elites, as was the case in Sierra Leone.

With respect to economic growth and developmental outcomes, many resource-rich countries perform poorly in comparison to their less resource-rich counterparts. This phenomenon, often referred to as the *resource curse* or the *paradox of plenty*, is exemplified in countries such as Algeria, the Democratic Republic of the Congo, Iraq, and Nigeria.⁷ The resource curse has a number of potential causes, including the following:

- A government that is able to finance its budget through natural resource revenues rather than public taxation can easily become detached from, and therefore less accountable to, the populace.

⁵ The numerous examples of secessionist movements in resource-rich areas include Aceh, in Indonesia; Biafra, in Nigeria; Bougainville, in Papua New Guinea; Cabinda, in Angola; Kurdistan, in Iraq; and southern Sudan.

⁶ For further discussion of the conflict in Sierra Leone, see, for example, Roy Maconachie, "The Diamond Area Community Development Fund: Micropolitics and Community-led Development in Post-war Sierra Leone," in this volume.

⁷ The term *resource curse* was coined by Richard M. Auty (1993); *paradox of plenty* was coined by Terry Lynn Karl (1997). At its broadest, the phrase *resource curse* refers not only to poor economic development, but also to other negative political and social outcomes that have been associated with abundant natural resources, including detachment from the electorate and increased risk of armed conflict.

- Resource revenues often fuel patronage, corruption, and rent seeking, all of which may promote the interests of a small and predatory elite.⁸ In Nigeria, for example, it is estimated that 1 percent of the population enjoys 80 percent of the oil revenues (Kalu 2008).
- When the group in power focuses on short-term gains (sometimes in an effort to meet popular demands), the results may include overspending, poor investment decisions, and ill-conceived economic policies.
- In countries whose economies depend on a few valuable resources, the weakness of political and economic institutions may be compounded by exposure to price shocks, which occur when rapid shifts in raw material prices lead to abrupt fluctuations in resource revenues.

Political and economic underperformance is endemic in many resource-rich countries—which, according to empirical studies, renders them vulnerable to conflict. Several studies have documented that armed civil conflict is more likely to occur in poor countries than in rich ones.⁹ Research also shows that dysfunctional institutions and low state capacity are positively correlated with an increased likelihood of conflict.¹⁰

Supporting the case study evidence (Ross 2004a, 2004b), several statistical studies document strong and significant relationships between particular natural resources and conflict, but few have been able to disentangle the possible mechanisms behind the relationships. James Fearon and David Laitin (2003), for example, have found that oil increases the likelihood of conflict—a finding that has been confirmed by the work of Indra de Soysa and Eric Neumayer (2007), Macartan Humphreys (2005), and Päivi Lujala (2010). Lujala has found that when oil and gas are located in the conflict area, conflicts tend to be longer and more severe (Lujala 2009, 2010). Taken together, Lujala shows that (1) oil-producing countries are 1.5 to 2 times more likely to experience armed civil conflict than nonproducers, and that (2) when internal conflict occurs in a region that has oil reserves, it lasts twice as long as conflicts that occur in areas without oil reserves, and combatant deaths are twice as high. Collier and Hoeffler's 2006 study of conflict types links oil to higher risk of secessionist conflict, and Lujala (2009) shows that secessionist conflicts in regions with oil reserves tend to be more severe than any other conflicts.

⁸ *Rent seeking* refers to attempts to capture economic benefits without contributing to overall economic production. In the case of high-value natural resources, where revenues are extraordinarily high in relation to the costs of extraction, rent seekers may attempt to capture rents through such means as corrupt practices and patronage. Apart from the fact that rent seeking does not contribute to overall economic activity, it can directly undermine economic outcomes—by, for example, weakening economic institutions or diverting revenues from education and other activities that are crucial for economic growth.

⁹ See, for example, Collier and Hoeffler (2004), Fearon and Laitin (2003), and Hegre and Sambanis (2006).

¹⁰ See, for example, Collier et al. (2003).

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Diamonds and other gemstones have also been subject to statistical studies. Fearon (2004) and Lujala (2009, 2010) have shown that gemstones have effects similar to those of oil—namely, conflict is more likely and tends to last longer. The role of timber, opium, and other high-value crops is less clear. There is some evidence that opium cultivation makes conflicts last longer (Fearon 2004; Lujala 2010), but little systematic evidence links timber production to civil war (Rustad et al. 2008).

RESOURCES FOR CONFLICT

Because natural resources have varying characteristics, they are not equally relevant to conflict—and those that are relevant may be so for different reasons. High-value resources, for example, may be either renewable or nonrenewable, although most—such as oil, gas, rutile, coltan, cobalt, diamonds, and gold—are nonrenewable, and tend to be located in geographically limited areas. What all high-value resources have in common, however, is the potential to yield substantial revenue.

Some high-value resources are limited to confined areas and depend on sophisticated and expensive extraction methods or require special types of transportation (e.g., pipelines). Because such resources are difficult to loot and are generally securely controlled by the government during both peace and war, they provide fewer opportunities for conflict financing.¹¹ Thus, the revenues from resources such as oil, natural gas, kimberlite diamonds, copper, and rutile are likely to accrue to the central government and those who control it. Such resources may nevertheless play a role in conflict: rebel movements may seek to oust the government to gain control of them, and if the resources are located in more remote areas, they may play a role in secessionist uprisings (Le Billon 2001). Rebels may also loot existing stockpiles of commodities or may attempt to bring extraction or transportation to a halt, in order to cut off the central government from its revenue source. Finally, the large revenues derived from high-value resources may increase the risk of conflict through adverse effects on political and economic institutions.

Some high-value resources are linked to conflict because of their financing potential.¹² However deep grievances may be, rebellion is unlikely to begin or to be sustained without financing opportunities. Since the end of the Cold War,

¹¹ An extreme case is offshore oil and gas drilling, in which the product can be exported by pipelines or ships without ever being present on land in the producing country.

¹² Resources that are used to finance conflict are sometimes referred to as *conflict resources*. Although definitions of the term vary, one widely used definition is that of Global Witness (n.d.): “Conflict resources are natural resources whose systematic exploitation and trade in a context of conflict contribute to, benefit from or result in the commission of serious violations of human rights, violations of international humanitarian law or violations amounting to crimes under international law.” Because this definition applies only to conflicts in which there are specific violations of international law, it has a somewhat narrower scope than others.

financing from the superpowers has declined, and revenues from valuable natural resources have gained importance as a source of conflict financing.¹³

The resources most suitable for wartime looting have extremely high value-to-weight ratio and can be easily extracted, concealed, smuggled, and sold. Easy extraction is a particular advantage: a resource that can be extracted by individuals or small groups using simple tools (that is, through artisanal mining techniques) can be readily exploited by rebels who either undertake the mining themselves or use forced labor. Among the commodities with high price-to-weight ratios that can be artisanally mined are alluvial gold, alluvial diamonds, and gemstones such as rubies and sapphires.¹⁴ Rebels do not need to rely on extraction directly; they also engage in illegal taxation of trade and export routes. And in some cases, including Colombia and Nigeria, rebels have succeeded in obtaining ransoms from extractive firms by threatening to blow up oil pipelines or by kidnapping personnel working on installations.

When it comes to conflict financing, many natural resources have another advantage: they are generic, which means that their origins cannot be traced as easily as those of manufactured products. Because generic illegal commodities can be readily integrated into legal trade channels, they are a particularly lucrative form of contraband, with trade prices that differ only marginally from those of their legal counterparts.

Another advantage of some high-value resources is their scarcity. Some occur in only a small number of countries and have few substitutes, and are therefore of strategic importance. Demand for such resources may sometimes override other considerations, such as the legality of the exploitation, the behavior of the government that has granted exploitation rights, and the role of the commodities in financing warfare.

Of course, resources other than high-value minerals may play a role in conflict or have adverse effects on economic and political institutions. Most notable are coca and opium, which have been linked to conflicts in Latin America and Asia, respectively, and timber, which has been connected to a number of conflicts in Africa and Southeast Asia. Fisheries have also been used to finance conflict; in Somalia, for example, some warring groups have sold false fishing licenses for offshore tuna reserves (Webersik and Crawford 2012).

FROM CONFLICT TO PROSPERITY: WHAT CAN BE DONE?

When conflict ends, many of the original causes often remain unresolved—whether they relate to resources or not—and may even have been aggravated by the

¹³ There are, of course, other financing sources, including payments from nationals living abroad and voluntary and nonvoluntary support from civilians.

¹⁴ Alluvial deposits are found in sand, clay, and gravel discharged by rivers. Existing or ancient riverbeds can be mined using simple tools such as shovels, buckets, and pans.

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grievances and economic and political havoc associated with the conflict itself.¹⁵ Post-conflict countries thus face daunting challenges when it comes to building peace, reducing poverty, and managing natural resources—particularly when poor resource management may be undermining both peacebuilding and poverty reduction. As is clear from both the chapters in this volume and the literature in general, many resource-rich post-conflict countries are unable to sustain peace. This observation has been confirmed by empirical studies: for example, Rustad and Binningsbø's analysis of 285 episodes of armed civil conflict shows that when natural resources play a role, the period of post-conflict peace is 40 percent shorter than when they do not (Rustad and Binningsbø 2010).¹⁶

The difficulty of sustaining peace when high-value natural resources are involved has two key implications: (1) the conflicts involving such resources are generally harder to resolve; and (2) thus far, the measures that have been used to manage natural resources and their associated revenues are generally unsatisfactory. Improved management of high-value natural resources and the associated revenues is thus fundamental to peacebuilding.

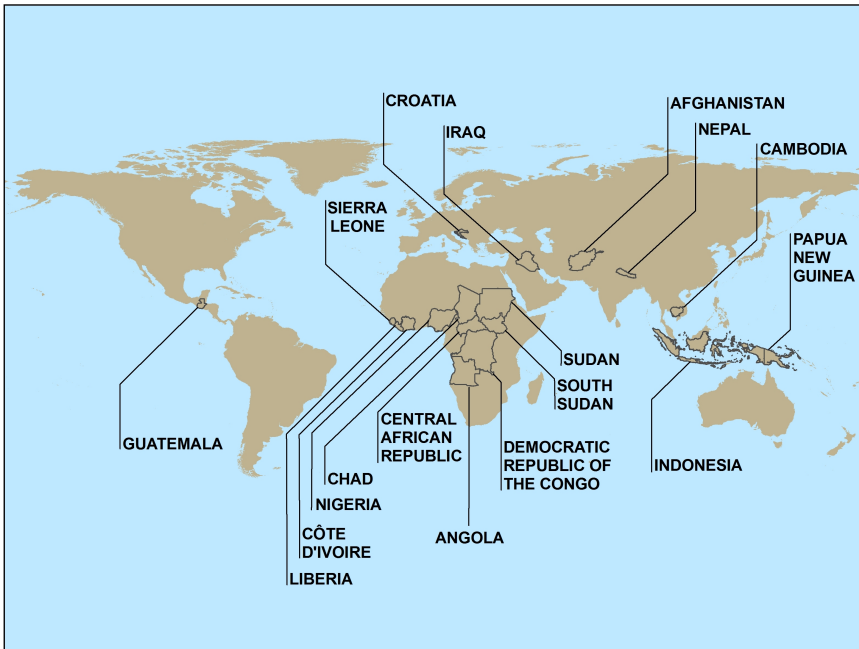
This volume addresses the full range of challenges associated with high-value resources in post-conflict settings. Its thirty chapters reflect the perspectives of forty-one contributors and consider the experiences of eighteen countries (see figure 3); the book also includes analyses of additional countries. The chapters vary in their approach: some focus on particular cases, such as Afghanistan, Sierra Leone, or Sudan; and others on particular resources, such as oil, diamonds, or timber. Still others consider specific policy options, such as conflict-sensitive resource extraction or decentralized revenue distribution; such options are often discussed in light of one or more case examples.

Broadly speaking, the organization of the volume reflects the successive stages in the chain that extends from resource extraction to final allocation and expenditure of revenues. The chapters are grouped into five sections that examine specific challenges and opportunities within each stage of the resource chain.

Part 1 focuses on the ways in which host governments, extractive industries, and the international community can strengthen the management of extraction to promote peace. Once a peace agreement is signed, one of the crucial tasks is to prevent potential peace spoilers from obtaining access to the resources that

¹⁵ It is important to note that in some cases, high-value resources have nothing to do with triggering or financing the conflict—but as the conflict winds down, they become important issues to be addressed in the peacebuilding process.

¹⁶ The term *conflict episode* refers to how a conflict is reported in the UCDP/PRIO Armed Conflict Dataset: a peace period is defined as the absence of conflict for more than two calendar years, and begins the first day that hostilities end (e.g., after military victory by one side) (Gleditsch et al. 2002; Harbom and Wallensteen 2007, 2009). The Rustad and Binningsbø 2010 study considers oil, gas, diamonds, minerals, forest resources, land, and agricultural products (including crops used to produce drugs), and all internal conflicts from the UCDP/PRIO Armed Conflict Dataset from 1946 through 2006.



Post-conflict and conflict-affected countries and territories from which lessons have been drawn in this book, either through case studies or broader thematic analyses

had been used to finance the conflict or that could be used to finance a renewed conflict. Post-conflict countries may also need to deal with contracts signed by previous governments, transitional governments, or rebel groups, in which the shortsighted interests of the few may have trumped the long-term development needs of the population as a whole. Extractive companies, which may be reluctant to conduct their business in ways that take post-conflict fragility into account, which intentionally enter post-conflict countries in order to take advantage of weak governance structures, or which may simply be unsure how to develop conflict-sensitive projects, pose yet another challenge.¹⁷

Part 2 focuses on the instruments used to track commodities and revenues. In both cases, transparency is critical. If conflict resources are to be prevented from entering markets, their origins must be known; similarly, to curtail corruption and patronage, revenue flows between extractive industries and governments

¹⁷ Conflict-sensitive projects take into consideration the causes and impacts of past conflicts, and try to minimize further negative impacts by developing extraction strategies that, at the very least, do not contribute to renewed conflict—and, ideally, contribute to the peace process.

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must be made public. Specifically, part 2 considers the Kimberley Process Certification Scheme, which tracks the origin and trade of rough diamonds; the Extractive Industries Transparency Initiative, which supports transparency in the management of oil, gas, and mining revenues; and the Forest Law Enforcement, Governance and Trade initiative of the European Union, which seeks to curb illegal timber harvesting and trade.

Many high-value resources generate substantial revenues that the central government distributes, by means of budgetary allocations or direct transfers, to lower-level administrative units. The chapters in part 3 explore the pros and cons of various options for revenue distribution and address one of the most contentious issues associated with high-value resources: whether producing regions should receive preferential treatment in revenue distribution. Because many post-conflict countries are riddled with corruption, which diverts revenues from economic and social development needs, most of the chapters in part 3 also consider measures that can help stem corruption.

Even if resource revenues are distributed in a way that producing regions regard as fair, this does not ensure long-term development and peace. Long-term development and sustainable peace require that the revenues accruing to the central government and lower administrative units be spent wisely. But because many post-conflict countries are burdened by weak institutions and corrupt practices, it is difficult to ensure that revenue spending will have the desired effect on long-term development. Institution building is therefore crucial to natural resource management. Part 4 examines the role of revenue allocation and institution building, and includes several in-depth case studies on various approaches.

Resource management decisions promoted by donors and made by the central government may have strong and unintended effects on local livelihoods. Resources that have fueled conflict may also be central to the survival of local communities; hence, interfering with the extraction of such resources may create new grievances and conflicts. Part 5 highlights the importance of taking local livelihoods and economies into account in the design and implementation of approaches to managing high-value natural resources. The chapters address sustainable forest management, the precarious position of women in artisanal mining, the effects of environmental degradation on the peace process, and the vulnerability of farmers who cultivate opium poppy.

A concluding chapter distills lessons from the preceding chapters and identifies sequencing options for various approaches to high-value natural resource management.

Taken together, the chapters in this volume offer a consistent message: proper management of high-value natural resources is crucial in the aftermath of armed conflict. Effective management of these key assets can support a range of peacebuilding objectives—from livelihood and macroeconomic recovery, to good governance and inclusive political processes, to improved security. But the chapters also demonstrate that there is no single, universally applicable approach to natural resource management in post-conflict settings.

On the one hand, the many strategies presented in this volume are not mutually exclusive but complementary. At the same time, not all strategies are appropriate for all post-conflict countries or for all natural resources. Resource management initiatives must take into account a number of factors, including the type of resources involved; past, current, and potential linkages with conflict; both regional and international dynamics and trade patterns; institutional quality and capacity with respect to resource management; and conditions that may have shaped resource management in the past. For example, where pre-conflict patronage systems and customary rules still exert strong influence, they should be attended to. Similarly, institutional capacity may limit the types of approaches that can be adopted; there may be little point, for instance, in putting time, money, and effort into comprehensive contract reviews when the political will to act on the results is lacking. Thus, decisions about how to improve the management of high-value natural resources in post-conflict settings require, first and foremost, thorough knowledge of the context, including the limitations on institutional capacity and political will. Only then is it possible to choose the appropriate strategies, determine how they will be implemented, and assign them priority within the overall post-conflict peacebuilding process.

One must always keep in mind the opportunities that lie, sometimes well hidden, in high-value resources. With improved governance, resource-rich countries can turn the resource curse into a blessing. Although many of the cases in this book depict missed opportunities and failed efforts to bring countries and people to peace, the hope is that this volume, by recounting past successes as well as failures, will help readers grasp the many opportunities that high-value natural resources offer to war-torn countries.

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