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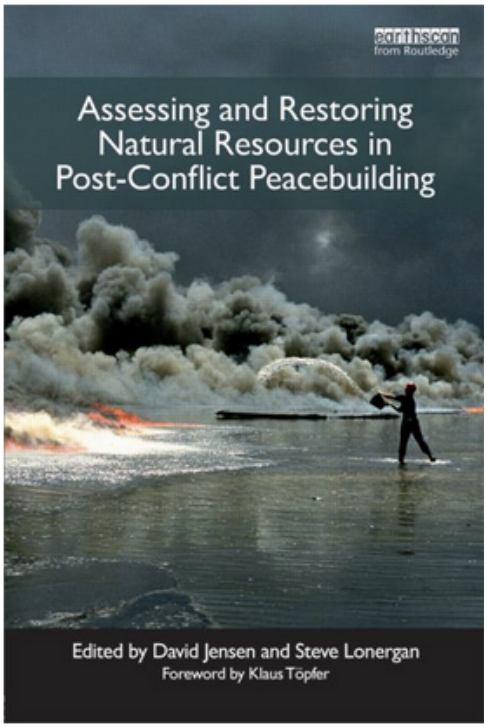

Environmental assessment as a tool for peacebuilding and development: Initial lessons from capacity building in Sierra Leone

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Environmental assessment as a tool for peacebuilding and development: Initial lessons from capacity building in Sierra Leone

Oli Brown, Morgan Hauptfleisch, Haddijatou Jallow, and Peter Tarr

A decade after the end of Sierra Leone's civil war, the country's rich mineral and agricultural potential is generating considerable interest from foreign investors. The general public in Sierra Leone holds high expectations of an investment-accelerated peace dividend that will provide jobs and economic growth on the basis of rich natural resources. But the legacy of governmental collapse during the conflict, together with the historical tendency of extractive companies to underdeliver on promises of social benefits and environmental protection, present risks for the peacebuilding process, as well as for efforts to promote inclusive socioeconomic development.

The challenge for the government of Sierra Leone and, in particular, its Environment Protection Agency (EPA-SL), is to put in place systems, regulations, and mechanisms to select investments that will benefit the country; to monitor investors' activities; and to ensure that investors live up to their promises. With more than one hundred mining companies operating in Sierra Leone, 82 percent of its land area already allocated to exploration or exploitation licenses, and nearly 10 percent of its arable land under negotiation for use by agribusiness, mining and industrial agriculture will undoubtedly shape the future of the country—for better or worse.

Since July 2010 the United Nations Environment Programme (UNEP) has had a program in Sierra Leone working with the EPA-SL on a variety of natural resource–related projects. One focus has been to build the EPA-SL's capacity to enforce the effective use of environmental impact assessments (EIAs) and strategic environmental assessments (SEAs) through a "South-South" collaboration with

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This chapter argues that investing in environmental assessment is a focused and cost-effective intervention in post-conflict states because EIAs are a catalytic intervention for environmental governance that has long-lived implications for the sustainability of extractive industries. The timing and sequencing will vary depending on the specific case, but such an intervention should move in step with increased investment activity in a post-conflict country. This chapter outlines some of the challenges to that process in Sierra Leone and describes the ways in which these challenges have been addressed.

ENVIRONMENTAL HISTORY OF SIERRA LEONE

The small, West African nation of Sierra Leone ranks low in the Human Development Index (158th out of 169 countries) but is rich in natural resources and beautiful landscapes (UNDP 2010).

Though diamonds are its best-known mineral—the third largest diamond in the world, the 969 carat "Star of Sierra Leone," was found here in 1972—the country also holds valuable reserves of iron ore, gold, bauxite (for aluminum), and rutile (from which titanium oxide is produced). As with other West African nations, oil may one day become a valuable export: in late 2010 the U.S. exploration firm Anadarko announced the discovery of commercially recoverable quantities of offshore oil and gas near the Liberian border (AP 2010).

Meanwhile, the country's year-round warm temperatures, fertile soil, plentiful fresh water, and proximity to European markets make it an attractive prospect for agribusiness: the government has identified as priority crops sugarcane for ethanol and palm oil for the food industry. Sierra Leone's coastline, fed by the rich Guinean maritime current, provides the fish that make up 80 percent of the animal protein consumed by its people (FAO n.d.). Finally, the country's beautiful beaches fostered a small but valuable tourism industry until civil war spilled over from neighboring Liberia in 1991.

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[1] An EIA is an analytical process that systematically examines the possible environmental consequences of the implementation of a project, program, or policy (UN 1997). In the case of Sierra Leone, proponents of a project are required to complete a scoping document that lays out the scope and scale of their proposed project. On the basis of that scoping document, the EPA-SL determines whether to direct them to commission an independent consultant or company to produce an EIA of appropriate detail. This EIA is reviewed by the EPA-SL and has to be available for public disclosure and comment in at least three places. If the EIA and the resulting environmental management plan are to the EPA-SL's satisfaction, an environmental license is awarded. Acquisition of an environmental license is a precondition to applying for a mining license. SEAs comprise a range of "analytical and participatory approaches that aim to integrate environmental considerations into policies, plans and programmes and evaluate the inter linkages with economic and social considerations" (OECD 2006, 24).

The civil war—which ravaged the country for eleven years, killing tens of thousands and displacing an estimated 2 million people—was triggered by widespread resentment over uneven division of the benefits from the country's natural resources, which were mostly captured by the Freetown-based elite while large portions of the rural population languished in destitution and unemployment. Natural resources financed and perpetuated the conflict: diamonds and other minerals were used to fund combatants and became the spoils of war. Capturing valuable diamond areas became a strategic objective of the Revolutionary United Front (RUF) and other warring parties (UNEP 2010). A report by the United Nations Panel of Experts on Sierra Leone estimated that beginning in 1998 the RUF and their allies funded their operations with smuggled diamonds that had an estimated value of between US$25 and US$125 million each year (UNSC 2000).

In addition to the direct human cost, the conflict had a devastating impact on the environment and economy of Sierra Leone. Transport and service

infrastructure was destroyed across the country, industrial mining stopped, and even basic government functions, including environmental management, almost entirely ceased.

PEACEBUILDING EFFORTS

Successive negotiations attempting to draw the conflict to a close finally resulted in the Lomé Peace Accord between the government and the RUF, which was signed in the Togolese capital in 1999. The accord was supported by the United Nations Mission in Sierra Leone (UNAMSIL), one of the largest UN peacekeeping missions ever relative to the size of the population: 17,000 UNAMSIL soldiers in a country with a population of 5.2 million. However, continuing guerrilla fighting meant that the end of hostilities was not declared until January 2002. By that time the process of disarmament, demobilization, and reintegration had disarmed over 72,000 combatants (UNEP 2010).

Starting in 2002, UNAMSIL began to draw down its soldiers and, in line with its mandate, fully withdrew at the end of 2006 (UNEP 2010). In June 2006 Sierra Leone became an agenda country of the newly formed UN Peacebuilding Commission, and the Sierra Leone Peacebuilding Cooperation Framework was adopted in December 2007. By late 2008 the United Nations Integrated Peacebuilding Office in Sierra Leone (UNIPSIL) was created to coordinate the UN's work to consolidate peace and ease the transition to long-term development.

Today, Sierra Leone is at a unique juncture in the process of peace consolidation. In many post-conflict situations fragile governments face the daunting challenge of managing belligerent groups. Sierra Leone is different. The RUF has completely disbanded and has not dissolved into a system of warlords or criminal gangs; most discussions about the group are debates on its history rather than its possible resurgence. As long as the 2012 elections occur without major incident, UNIPSIL aims to be the first peacebuilding mission to complete a planned withdrawal.

But many challenges remain. The major one is sustaining Sierra Leone's economic recovery. In the absence of a significant manufacturing or service sector and with widespread unemployment, future economic growth must come from the exploitation of Sierra Leone's natural resources, at least in the short to medium term.

A 2010 assessment by UNEP found that the civil war significantly damaged the basic environmental resources of the country, namely water and agricultural land, and seriously undermined institutional capacity (UNEP 2010). The assessment also found that although the conflict ended some years ago, its environmental effects and continued unsustainable natural resource exploitation present challenges to development and peace consolidation. These include unmet expectations from natural resources, low levels of transparency and accountability, poor sharing of benefits, and perceptions that low-level

violence over natural resources has increased. In addition, many of the coping strategies from the large-scale population displacement resulted in unsustainable forestry, agricultural, and mining practices that became entrenched and persist to this day. The assessment warned that many of the risk factors for conflict that existed in the 1980s and 1990s have not yet been adequately addressed (UNEP 2010).

On a more positive note, the report concluded that if managed effectively, the country's natural resources and environment could play an important peacebuilding and developmental role, constructing the foundation for sustainable jobs and economic growth. In particular, the report recommended making sustainable livelihoods a development priority, improving participation and consultation, building environmental governance capacity at the national and local levels, and establishing joint management of water and agricultural resources. Supporting this process is the underlying rationale for a UNEP program of assistance to Sierra Leone that began in July 2010 as part of the 2009–2012 UN Joint Vision for Sierra Leone (UNIPO 2008).

NATURAL RESOURCE MANAGEMENT

Restarting a viable economy after a civil war remains one of the most difficult challenges of peacebuilding (UNEP 2009). Sierra Leone's natural resources could play a major role in the country's regeneration. Its high-value resources hold the prospect of economic growth, macroeconomic stability, increased employment, and government revenue for desperately needed basic services in a country that has some of the highest rates of adult illiteracy and child and maternal mortality in the world.

In a September 2010 briefing to the United Nations Security Council, the Secretary-General's Executive Representative for UNIPSIL, Michael von der Schulenburg, underlined the importance of natural resources to peacebuilding in Sierra Leone. He noted that the exploitation of Sierra Leone's mineral resources could give the country the impetus it needs to pursue its development goals and could help break its dependency on outside donors, which is essential to offset the country's severe trade imbalance and to supplement government revenue (EconomyWatch 2011). Sierra Leone, he argued, "may be at the verge of turning from [a] major recipient of foreign assistance to becoming a major exporter of primary mineral and hydrocarbon products" (von der Schulenburg 2010).

However, he warned that experience in other parts of the world showed that countries dependent on the export of raw materials often suffered social dislocations, huge income disparities, rampant corruption, and environmental degradation. He noted that the sheer scale of mining agreements could be a "game-changer" for Sierra Leone. There is concern about the agreements' compliance with Sierra Leone's 2009 mining law, the transparency of contract negotiations, and the degree of economic power being conferred on a small number of investors (von der Schulenburg 2010).

Challenges for governance and peace consolidation

The growing influence and rising economic power of the country's natural resource sector create challenges for governance and peace consolidation in Sierra Leone in at least five ways. First, the government's management of its natural resource sector is a proxy for its overall effectiveness. Any democratic system emerging from a period of conflict is under pressure to provide jobs, create revenue, and generate a tangible peace dividend. In the absence of a manufacturing or service economy, most post-conflict countries rely on their natural resources to kick-start economic growth, a situation that is especially true in Sierra Leone. Effective management of Sierra Leone's natural resources from an early stage can help to build confidence in the wider political process of peace consolidation. On the other hand, if large extractive operations begin to dominate local service provision (for example, by being the sole providers of health care and education) the legitimacy of public authorities as providers of services might suffer.

Second, the influx of significant foreign investment in Sierra Leone is generating high expectations of rapid job and economic growth among the general public. Local communities may have unrealistic expectations of what external investors are able and willing to provide. For example, people may expect that jobs will be available regardless of the applicants' skills or literacy. And investing companies have exaggerated the benefits they intend to provide, promising schools, hospitals, and other amenities. Whatever the cause, a gulf can emerge between the popular conception of a project and its reality. Unmet expectations can quickly spread into a wider sense of disappointment with the government and anger at the company.

Third, the way that natural resources are allocated can fundamentally change the balance of political power. In Sierra Leone, natural resources provide one of the few routes for wealth creation and livelihood support, so the way resources are allocated can alter power politics. On the one hand, equitable sharing of benefits may alleviate poverty. On the other, elites often capture the benefits of natural resources and use them to reinforce their position and privilege, breeding resentment among the general population.

Fourth, some of the large investments promise to increase the government's revenue significantly. Such investments would outweigh the country's thin tax base and could widen a democratic deficit if the government becomes more responsive to its major investors than to the general population. Already there are indications that large investors have excessive influence over political processes in the country, particularly given the often favorable treatment they receive in the local media.

Fifth, the operations of extractive companies may undermine efforts to increase transparency and build accountability. The majority of resource-intensive operations in the country are carried out by "juniors," small extractive companies that often have low standards for corporate responsibility. When these low standards meet low pay rates, a bureaucracy with numerous hurdles for business, and a culture that can be permissive of corruption, an increase in the importance and

prominence of natural resources in the country's economy can put accountability and transparency at risk.

The mining sector

Mining is often seen as a barometer of Sierra Leone's well-being. The country's considerable reserves of diamonds, rutile, bauxite, gold, and iron ore were first tapped in the 1930s. Run down by successive kleptocracies before the civil war, many of the mining areas were extensively damaged during the fighting. By the end of the conflict, the mining sector was providing just 1 percent of government revenues and 4 percent of GDP, down from 8 percent of government revenues and 20 percent of GDP in 1995 (Ministry of Mineral Resources 2010; Statistics Sierra Leone 2006).

However, mining has played an important role in Sierra Leone's post-conflict economic recovery. Between 2001 and 2006 the rate of growth in the mining sector exceeded the average of 8 percent per annum growth that the rest of the economy experienced for four out of five years (Adam Smith Institute 2007).

Meanwhile, rising commodity prices are generating renewed interest in Sierra Leone's mineral resources: worldwide exploration budgets quadrupled from US$1.9 billion in 2002 to an estimated US$7.5 billion in 2006, and much of the spending was for exploration in Africa (Ministry of Mineral Resources 2010). Anadarko recently discovered commercially recoverable quantities of offshore oil near the Liberian border (AP 2010). Many Sierra Leoneans look to the resurgent mining sector as their path away from reliance on donors and toward financial independence (UNEP 2010).

Large-scale mining has accelerated since the end of the civil war. By 2009 more than 150 prospecting and exploration licenses had been granted to more than one hundred companies; the licenses cover approximately 60,000 square kilometers (82 percent of the country's surface area) (National Advocacy Coalition on Extractives 2009). Three large-scale mechanized mines have been reactivated. The Adam Smith Institute, which has worked extensively on the issue of mining in Sierra Leone, estimated in 2007 that mining reform could raise official mining revenues from US$174 million in 2006 to US$1.2 billion by 2020. The World Bank estimates that between 200,000 and 400,000 people (between 4 percent and 8 percent of the population) depend on artisanal mining for the greater part of their livelihood (Adam Smith Institute 2007).

Although mining promises jobs, economic growth, and a level of strategic importance that the country has rarely experienced, its current importance to the economy is often overrated. Government income from mining is low, hovering at around 3 percent to 5 percent of the export value, compared to a typical target of 7 percent to 10 percent. The field is dominated by predatory and poorly regulated junior companies with track records of overpromising and underdelivering.

In part this is a result of the government signing deals that may be excessively generous. Several companies have negotiated arrangements that allow

them to avoid royalty payments and that provide wide-ranging tax exemptions. By late 2010 there was enough concern about the terms for President Koroma to announce a complete review of all major mining contracts (Melik 2010). By mid-2011 this process had resulted in the successful renegotiation of two of the large mining contracts and improved terms for the government.

The country does not have a solid track record when it comes to managing the conduct of large extractive companies. Several parts of the country, particularly around Kono in the east, are struggling with the environmental legacy of past mining operations, both artisanal and industrial. The financial benefits are divided nationally, but negative environmental impacts are mostly localized in rural areas with vulnerable communities. Small-scale and artisanal mining, mostly for gold and diamonds, and quarrying for construction stone are important sources of employment but also a major cause of land degradation in some areas.

The agricultural sector

Sierra Leone's agricultural potential is less well known than its mineral resources, but a wave of new agricultural investment is beginning. In 2010 a Switzerland-based bio-energy company, Addax, received a 57,000-hectare concession near the center of the country to grow sugarcane to supply Europe's growing market for ethanol. Nedoil, a private entity attached to the Lion Heart Foundation (a not-for-profit health-focused charity), has plans for a 50,000-hectare oil palm plantation. Others are likely to follow. In mid-2011 the California-based Oakland Institute estimated that roughly 500,000 hectares of arable land (about 10 percent of the country's total) were under negotiation or had already been leased to agribusiness in Sierra Leone (Baxter 2011). The investments have caused concern in a country where roughly 70 percent of the population is engaged in subsistence agriculture, land ownership is a highly sensitive and politicized subject, and food security is an ongoing worry (Green Scenery 2010).

Because tenure security is lacking, many farmers become agricultural workers on large-scale plantations, where they are often paid low wages and provided with little social or legal protection. For the government to maximize the benefits from agricultural resources, it must facilitate and manage large-scale investment to attract responsible investors who ensure a fair and equitable financial return to the nation, and promote and protect the well-being of the natural and social environment.

Environmental governance

The civil war had a dramatic impact on Sierra Leone's people and infrastructure. But the period of governmental mismanagement that led up to the conflict arguably had a more pernicious impact on environmental management, which almost entirely collapsed. With numerous priorities requiring attention in the immediate aftermath of the conflict, it is perhaps little surprise that natural resource management and environmental protection have been largely overlooked.

Sierra Leone placed last in Yale University's 2010 Environmental Protection Index, a ranking of 163 countries' environmental management that noted some serious regressions in Sierra Leone since the end of the civil war. The country scored particularly low in the area of environmental health; this underlines the effects of environmental degradation on the personal health of the Sierra Leonean people (Yale Center for Environmental Law and Policy 2010).

Several institutions are part of the framework for environmental governance, with ministerial functions of the national government centered in the capital city, Freetown, and local-level administration split between the traditional paramount chiefs and the modern district councils. Though this is now changing with the creation of the EPA-SL, historically the capacity of institutional authorities was inadequate, with little environmental planning taking place in most places and sectors. The planning that has been done since the end of the civil war has tended to involve a limited range of stakeholders and little in the way of consultation (UNEP 2010).

The national institutions for environmental management have gone through a few incarnations. The Environmental Protection Act of 2000 was passed before the peace agreement and the disarmament, demobilization, and reintegration process had put an end to major hostilities. The legislation established a Division of the Environment that came to rest within the Ministry of Lands, Country Planning, and the Environment (UNEP 2010).

In 2005, the National Commission for Environment and Forestry was created under the auspices of the Office of the President to coordinate and facilitate environmental governance. However, its legal status was never resolved, and in 2008 a new Environment Protection Act replaced the National Commission with the Sierra Leone Environment Protection Agency (originally called SLEPA but now known by the acronym EPA-SL).

The 2008 Act (which was amended in 2010) devolved most responsibility for environmental management to the self-standing EPA-SL, which reports directly to the Office of the President. The EPA-SL is the focal point of all environment matters; it formulates policy advice and coordinates overall guidance for environmental management in the country.

ENVIRONMENTAL ASSESSMENT

One of the EPA-SL's central responsibilities is to monitor the environmental impacts of major development projects and to enforce the projects' compliance with their own environmental management plans and with nationally determined environmental standards. This involves reviewing EIAs submitted by project proponents, issuing environmental licenses, and monitoring the environmental performance of mining and agribusiness companies. The 2009 Mines and Minerals Act also requires that mining companies submit EIAs and receive environmental licenses before they are eligible to apply for a mining license.

In early 2011, over the objections of several of the large mining companies, parliament passed a fee schedule that sets out a point system to quantify the

environmental footprint of a project, determines what sort of EIA is needed, and allows the agency to recoup its costs from the license award process and subsequent monitoring.[2] At a higher level, the EPA-SL uses SEAs to formulate overall guidance for environmental management.

Throughout much of 2011, the Extractive Industries Project, funded by the World Bank and the United Kingdom's Department for International Development, developed a series of environmental and social regulations. These clarified the need for project proponents to conduct EIAs of varying detail, depending on the scope and scale of their projects. The regulations lay out clear expectations with regard to the EIAs, establish timetables for submission of the EIAs and for their review by the EPA-SL, and prompt the EPA-SL to conduct SEAs of districts where artisanal and industrial mining has been most prevalent.

UNEP's 2010 assessment confirmed that environmental degradation is widespread in both rural and urban areas of the country. In the future it is particularly important that the longstanding environmental and natural resource issues that contributed to the initial conflict are managed, that any growing tensions over the use of natural resources are defused, and that Sierra Leone's considerable natural resource assets are used in a way that supports stability and long-term development. Many of the impacts experienced in the past may be prevented in the future if environmental planning and management tools, including EIAs and SEAs, are applied consistently at both the policy and project levels. There can be no durable peace if the natural resources that sustain people's livelihoods are damaged, degraded, or destroyed (UNEP 2009, 2010).

Environmental assessment is an important tool for at least five reasons. First, universally applied and rigorously enforced environmental planning and assessment helps to weed out the most poorly performing companies: those that are unable or unwilling to submit EIAs should, according to legislation and the evolving regulations, cease operations. This should help to ensure that the country is not left dealing with damaging social and environmental impacts that can take decades to play out, cost millions to clean up, and be highly destabilizing.

Second, environmental assessment helps to raise the floor of environmental expectations in a way that spreads best practices and helps better-performing companies to operate profitably in the country. Thus it helps to create a better investment climate for companies that are prepared to devote more time, energy, and resources to minimizing their environmental impacts, ideally triggering a race to the top rather than a slump to the bottom.

Third, exercises like SEAs can help to forge a common vision for how the country should exploit its natural resources. Better planning leads to better practices. A participatory, inclusive approach can also help to predict and prevent potential conflicts over the management of natural resources and over the division of revenues derived from them.

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[2] Environmental Impact Assessment License, Environment Protection Agency Regulations, 2010.

Fourth, environmental planning that is fact based and science led may have spillover benefits for other dimensions of governance, helping to depoliticize sensitive disputes over natural resources, increasing transparency, increasing confidence in politics and the legitimacy of government, and professionalizing decision making.

Finally, stakeholder engagement in environmental assessment processes can provide a platform for bringing divided communities together or create new channels for different segments of society to communicate and cooperate over a common issue.

Although issuing environmental permits and developing environmental planning tools might seem to be dull bureaucratic processes, they are key entry points for ensuring that negative impacts can be predicted and that appropriate social and environmental safeguards are put in place. This is perhaps the only time in the lifespan of an investment when the government has significant leverage over the type and nature of a mine or plantation. Getting the process right is one of the principal ways that any government can influence the design, technology, and financial models used in large-scale developments to ensure that long-term social and economic benefits accrue to the country with minimal environmental and social damage. Therefore, environmental assessment is a key opportunity to identify and mitigate potential sources of conflict caused by an investment.

Capacity building for environmental assessment

Historically, environmental assessment tools have rarely been applied, monitored, or enforced in Sierra Leone. Prior to 2008, although EIAs were required by law, they were often not done as part of development planning. If they were done, they were often of poor quality, and their results, including their environmental management plans, were often ignored by proponents of projects and decision makers alike. Compounding the problem, developers in large-, medium-, and small-scale enterprises often used outdated and inappropriate technology.

After the 2008 Environmental Protection Act was passed, EIAs were undertaken more commonly. However, limited capacity to review them at the EPA-SL led to a large backlog. This, in turn, slowed down the process for developers hoping to obtain mining and plantation licenses. It also encouraged developers to ignore or subvert what environmental standards and processes did exist.

SEA is not required by law, and it has rarely been applied at the policy, plan, or program level, either in government or by the private sector. A National Environmental Action Plan (the sort of product that can be created by SEA) was developed in the early 1990s with support from the World Bank; however, it was published in 1995 in the middle of the conflict, so any policy directions it recommended seem to have been quickly overcome by the chaos caused by the civil war. In 2010 it took several months to even uncover a copy of the plan, and there is little evidence that it ever informed policy in a substantial way.

A root-cause analysis was conducted in Sierra Leone in late 2010 to determine the underlying reasons for problems with environmental assessment (SAIEA 2010). Researchers learned that institutions tasked with regulating environmental assessment at various government and sectoral levels were weak and poorly resourced and that implementation tended to proceed on an ad hoc basis. In development planning, high-level government and private decision makers often assigned low priority to environmental protection. Quality control over environmental assessment was inadequate, and external reviews of EIAs and SEAs were conducted only rarely.

Training and research institutions were found to have insufficient capacity related to environmental assessment, and the media rarely reported on stories involving environmental assessments. For the most part, therefore, policy makers and the general public had a very limited understanding of assessment processes (SAIEA 2010).

The UNEP project

Building the EPA-SL's capacity to serve as a platform for managing Sierra Leone's natural resources was one objective of a country program initiated by UNEP in July 2010 and partly conducted in cooperation with SAIEA. UNEP and SAIEA's work with the EPA-SL took several forms. First, they conducted a capacity needs assessment to locate the gaps in capacity and determine what support the EPA-SL might need. Second, for several weeks SAIEA experts helped staff from the EPA-SL to work through the backlog of EIAs waiting for review. SAIEA experts from a variety of countries across southern Africa who are familiar with both mining issues and the particular challenges of operating in African developing countries worked alongside EPA-SL staff to review EIAs and compare their conclusions—an approach to technical assistance that was neither condescending nor displacing. Third, SAIEA staff provided training in EIA techniques and best practices for government and civil society representatives. Finally, SAIEA and UNEP personnel accompanied EPA-SL staff as they carried out monitoring inspections of mining and agribusiness sites.

LESSONS LEARNED

The experiences of the EPA-SL, UNEP, SAIEA, and other entities that are active in capacity building for environmental management in Sierra Leone may provide valuable lessons to other countries in a similar position. At least six elements are important components of an overall strategy: awareness raising, capacity building, streamlining of systems, training and regulation of practitioners, stakeholder participation, and regular monitoring.

Awareness raising

Raising awareness about the benefits of environmental assessment as a tool of development is a prerequisite for the creation of a functional environmental

assessment system in any country. In the case of Sierra Leone, there is a powerful argument to be made that it is also an investment in long-term peacebuilding.

Unfortunately, environmental assessment is often perceived to be a green hand brake that is designed to protect the natural environment against the threat of human development. But when implemented properly, it enhances the benefits of development projects and policies while it minimizes negative impacts. This needs to be understood by decision makers at all levels. Support from high-level political leaders can be an important way of giving these issues greater priority.

Awareness-raising workshops for high-level decision makers demonstrate the value of environmental assessment and clarify these links. EPA-SL, SAIEA, and UNEP organized one such awareness raising event in December 2010, at which President Koroma himself issued a statement underlining the importance of environmental assessment (Kalokoh 2010).

Objective and regular public reporting on environmental issues and environmental assessment processes improves people's awareness about the importance of environmental safeguards and promotes transparency in decision making. Nurturing journalists' understanding of the environment and environmental assessment can promote better reporting, which results in greater awareness and understanding of environmental assessment and its benefits. Given that transparency contributes to the building of the population's confidence and trust in government, reporting on the environment can also be an important peacebuilding tool.

Capacity building

Building staff, skills, and capacity is another prerequisite for more effective environmental assessment. Training on best practices and quality control of environmental assessment can be offered to key staff, line ministry environmental authorities, regional and local authorities, and parastatal environmental officers.

In Sierra Leone this training took the form of short-term courses and experienced practitioners' accompaniment of EPA-SL staff into the field to deliver hands-on training, especially in post-implementation monitoring and auditing.

Networking opportunities can help government and private environmental assessment practitioners. For example, practitioners can join international bodies, such as the International Association for Impact Assessment, and attend their annual conferences. This exposure to global thinking and well-established and supportive international networks can complement other capacity-building efforts.

Streamlining of systems

Streamlining of systems is necessary to ensure that environmental authorities do not become log-jammed with hundreds of reports waiting for review. Consultants can be brought in to assist in tackling a backlog, but a longer-term, less expensive solution is to improve the officials' capacity to conduct professional reviews.

Publishing best practice guidelines for EIAs and environmental management plans and making them widely available can help environmental practitioners and proponents of new projects to know what the law requires.

Training and regulation of practitioners

Training and regulation of practitioners builds up a professional cadre of environmental planners and assessors. A certification scheme for environmental practitioners improves the credibility of this growing sector and prevents unqualified people from conducting EIAs and SEAs. However, certification alone is not adequate; there needs to be a parallel process of quality control and a system of deregistering practitioners who are demonstrably incompetent or unethical.

Stakeholder participation

Stakeholder participation helps to build a coalition for transparent and effective environmental assessment. Public participation improves transparency, ensures consideration of community issues, and increases the likelihood that win-win solutions will be found in project planning and implementation. Actions that can improve public participation include the drafting of legislation to require it; training in public participation for governmental staff, environmental practitioners, and academic personnel; and project proponents' preparation and wide public circulation of well-illustrated, simply written, and succinct background information documents. Dissemination of background information at the onset of a project helps the public to understand the project components at an early stage and improves their ability to participate in discussions. All relevant documentation should be publicly available, ideally in a central location but also in the vicinity of the project area itself.

Regular monitoring

Regular monitoring of mining and agribusiness companies is critical to ensuring that proper environmental standards are enforced, but it is much easier said than done. Effective monitoring requires technical expertise across a wide range of areas, a great deal of expensive sampling equipment, and extensive experience in the various technical challenges presented by mining and agribusiness operations. It also requires careful management to ensure that the staff carrying out the monitoring resist any offers of bribes. Finally, it requires an architecture of law enforcement to ensure that any transgressions are properly redressed.

CONCLUSIONS

Post-conflict countries with weak environmental management and plans for growth that are fueled by access to natural resources face daunting challenges. The

imperative to kick-start economic growth using those natural resources can override the imperative to manage and mitigate the full social and environmental costs of extractive projects. Ensuring that economic growth does not come at the expense of the country's natural resource base and people's human rights requires considerable skill, equipment, and judgment. Getting it wrong can increase the risk that conflict will resume.

In any post-conflict situation, improved governance of natural resources and the environment is a litmus test of government stability and effectiveness (UNEP 2010). The challenge is to select the best possible investments and then monitor those investments long after the ink dries on the contract.

Environmental assessment at a macro level, through SEA, and at a project level, through EIA, has proven to be an important part of natural resource management and should be seen as a critical catalytic activity that warrants its own investment by government, civil society, and the international community in post-conflict states. These processes offer at least four concrete benefits for peacebuilding.

First, they act as a platform for citizen participation in decision making and provide an arena where divided groups can work together toward a common goal.

Second, if managed effectively, they can help build confidence in the government, demonstrate the government's legitimacy, and lead to a range of additional benefits, including greater transparency and more fact-based decision making.

Third, fact-based environmental assessment that is the subject of extensive consultation can help to strip the politics away from the power dynamics that often surround natural resources, and thus help to articulate a common vision for the role that natural resources should play as the country moves forward.

Finally, environmental assessment helps policy makers choose among companies, and it forces companies to be responsible environmental stewards, especially when assessments are followed by sustained monitoring and enforcement. It limits the negative environmental impacts of mining and agribusiness projects, thereby protecting health and livelihoods, reducing the likelihood that costly environmental remediation will be necessary, and preventing conflict.

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