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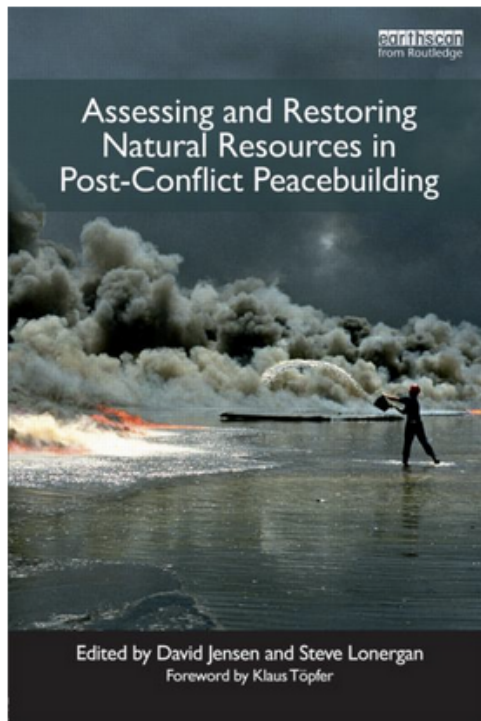
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This chapter first appeared in *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding*, edited by D. Jensen and S. Lonergan. It is one of 6 edited books on Post-Conflict Peacebuilding and Natural Resource Management (for more information, see [www.environmentalpeacebuilding.org](http://www.environmentalpeacebuilding.org)). The full book can be ordered from Routledge at <http://www.routledge.com/books/details/9781849712347/>.

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### Challenges and opportunities for mainstreaming environmental assessment tools in post-conflict settings

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Online publication date: May 2013

Suggested citation: G. Bouma. 2012. Challenges and opportunities for mainstreaming environmental assessment tools in post-conflict settings. In *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding*, ed. D. Jensen and S. Lonergan. London: Earthscan.

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# Challenges and opportunities for mainstreaming environmental assessment tools in post-conflict settings

*George Bouma*

The foundation of official development assistance (ODA) in post-conflict settings reflects the desire to build peace and stability, improve social dividends for the vulnerable and poor, and create self-sustaining governance and policy that encompass sustainable growth. Progress in this direction is supported by the program and project procedures of bilateral agencies and multilateral aid organizations. However, aid assistance in post-conflict situations is often geared more toward structural and macroeconomic governance than toward social and environmental dividends (Collier and Hoeffler 2004).

The rapid disbursement of financial resources on a large scale to alleviate urgent humanitarian needs and support post-conflict recovery and reconstruction often generates environmental risks. Periods of post-conflict rehabilitation are often characterized by hyperdevelopment, which may result in severe environmental impacts. For example, the need for an increased supply of timber for reconstruction can cause widespread deforestation.

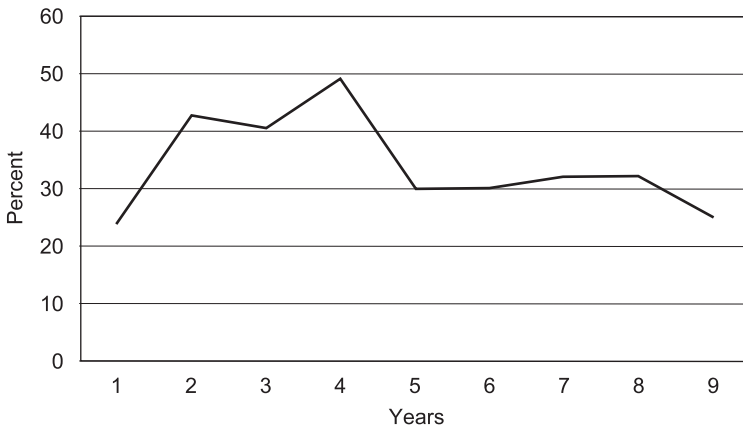
This chapter examines issues surrounding the environmental sustainability of reconstruction investments in these settings—specifically the relevance and application of environmental impact assessment (EIA) and strategic environmental assessment (SEA).<sup>1</sup>

The chapter begins by discussing the integration of environmental issues within post-conflict ODA and then compares environmental assessment methodologies—including for EIA, SEA, and their streamlined variants—as applied in post-conflict

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<sup>1</sup> SEA can apply either to proposed or existing plans, policies, or programs. They may be stand-alone procedures or integrated into the formulation of the plan, policy, or program.



**Figure 1. Average per capita official development assistance as a percentage of gross domestic product in years following peace agreement for five selected countries**

*Source:* Compiled by author with data from the World Bank (2011).

*Note:* The selected countries are Afghanistan, the Democratic Republic of the Congo, Ethiopia, Rwanda, and Timor-Leste.

situations. Environmental assessment tools, if they are to be applied consistently, must seek an entry point through the ODA process. The chapter identifies three such points: donor assistance databases, UN multi-donor trust funds, and the annual work plans of the UN and its partners. The chapter proceeds with an examination of these three tools in pilot studies in Afghanistan, Iraq, and Darfur, respectively. It concludes with a discussion of lessons learned, lessons that suggest that streamlined SEA and other tailored environmental assessment methodologies may be more effective than traditional EIA procedures for understanding the environmental implications of reconstruction plans in a post-conflict situation and for prioritizing mitigation measures.

**INTEGRATING ENVIRONMENTAL ISSUES WITHIN POST-CONFLICT OFFICIAL DEVELOPMENT ASSISTANCE**

ODA tends to peak in the years immediately following a peace agreement and to gradually decline thereafter (see figure 1). External private investment does occur in post-conflict situations, but because of the risks in such environments, it is usually in the form of small- and medium-sized enterprises seeking marginal gains from small investments. ODA constitutes the majority of capital flow after conflict, so it is the primary avenue for bringing peace and stability (Schwartz and Halkyard 2006).

In 2008, funding to fragile states represented 31 percent (US\$34.6 billion) of all ODA to developing countries, with 51 percent of that assistance benefiting just

six out of forty-three fragile states and territories (OECD 2009).<sup>2</sup> The capacity for disbursement of ODA is dependent on governance and on policy development with a broad range of stakeholders (Collier and Hoeffler 2004). Where governance is weak and policy development around environmental issues is poorly framed, sustainability is unlikely to figure prominently in the post-conflict period (Verheem et al. 2005). A failure to integrate environmental sustainability into development policy is common in developing countries (Hugé and Hens 2007), and this situation is exacerbated in post-conflict countries, where national development and poverty-reduction strategies take years to evolve.

Yet aid to post-conflict countries needs to be more effective if the Millennium Development Goals are to be achieved by 2015 (McGillvray and Feeney 2008).<sup>3</sup> This includes goal 7, the achievement of environmental sustainability, which has as much relevance in fragile states as anywhere else because a society that projects itself onto a sustainable development pathway may have less chance of relapsing into conflict (International Development Association 2004; UNEP 2009). At the same time, conflicts can have a wide array of environmental effects, including direct effects, such as degradation of land and water by pollution, destruction, and waste; indirect effects, such as overuse of natural resources caused by displacement and dislocation of local communities; and institutional effects, such as destruction of infrastructure and institutional capacity, which can slow development. Post-conflict migration can place increasing demands on services and infrastructure, making environmental health issues a larger problem and further exacerbating poverty brought on by the conflict. These issues need to be taken into account in the allocation of ODA to post-conflict countries and in the design, approval, and implementation of reconstruction projects. Both EIA and SEA have been proposed as tools to meet this objective.

## **COMPARING EIA AND SEA IN POST-CONFLICT SITUATIONS**

EIA is a robust methodology that can aid decision makers in understanding both the positive and negative impacts of a development project on natural resources and the environment. It integrates both social and environmental sustainability in the assessment process (Cashmore, Bond, and Sadler 2009; Elling 2009; Sadler 1996, 2004; Weaver et al. 2008; Westman 1985; Wood 2003). In the developed world, the effectiveness and limitations of a project-based EIA are well understood.

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<sup>2</sup> In a fragile state, the government lacks capacity and willingness to perform key state functions for the benefit of all. The effects of fragility stretch beyond poor services to include conflict, state collapse, loss of territorial control, extreme political instability, clientelist policies, and repression of or denial of resources to subgroups of the population. Post-conflict countries form a specific subset of fragile states. The six fragile states and territories that benefitted the most from ODA in 2008 were Iraq, Afghanistan, Ethiopia, the West Bank and the Gaza Strip, Sudan, and Uganda.

<sup>3</sup> For more information on the Millennium Development Goals, see [www.unmillenniumproject.org/goals/index.htm](http://www.unmillenniumproject.org/goals/index.htm).

However, in the developing world, policy, governance, and technical challenges reduce its effectiveness (Ali 2007; Kolhoff, Runhaar, and Driessen 2009; Rajaram and Das 2008; Rossouw and Wiseman 2004; Wood 2003). Major challenges for developing countries include incomplete regulatory frameworks, weak governance capacities, limited technical skills, and a lack of government administration and private sector engagement.

These challenges are exacerbated in post-conflict situations where transitional governments often perform the functions of a state until democratic elections occur. Until laws can be passed and implemented by legitimate government authorities, EIA processes are generally applied by development agencies in concert with their own policies and practices. Often EIA obligations are relaxed if the situation calls for emergency assistance.<sup>4</sup> In many cases, EIAs are seen as an additional administrative burden to reconstruction processes and provoke calls for fast-track mechanisms.

EIAs are not easily performed in post-conflict countries where there is weak governance, poor or confusing legal frameworks, insufficient technical skills, and limited baseline data. For example, in Afghanistan from 2004 to 2006, only six environmental impact statement documents were provided to the National Environmental Protection Agency. These were submitted only for information and comment and not for approval as required under law.<sup>5</sup> In Ethiopia, the EIA system has developed more as a result of donors' demands than as a response to the desires of politicians and decision makers (Ruffeis et al. 2010). As a result, it has been a top-down process that often lacks national ownership and consistent application.

Addressing environmental and social safeguards in bilateral reconstruction projects through EIAs is not prominent in post-conflict situations. Post-conflict governments are often overwhelmed with coordinating aid and understanding institutional responsibilities. Adding environmental criteria into this process is not a priority. Furthermore, it can take ten or more years to develop a functional project-based EIA system that is fully integrated into the fabric of governance and applied as a decision-making tool. Given these constraints, alternative approaches are needed in post-conflict countries.

SEAs may provide an alternative tool kit. If EIAs focus on positive and negative environmental impacts at the project level, SEAs move one level up by focusing on policies, programs, and plans. The 2005 Paris Declaration on Aid Effectiveness, which addresses increasing donor effectiveness and national ownership, calls for donors and partners to "develop and apply common approaches for 'strategic environmental assessment' at the sector and national levels" (OECD 2005, 7).

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<sup>4</sup> See, for example, Charles Kelly, "Mitigating the Environmental Impacts of Post-Conflict Assistance: Assessing USAID's Approach," in this book.

<sup>5</sup> Personal experience of author as international focal point for EIA capacity building in Afghanistan.

A comprehensive description of the SEA process is contained within the Organisation for Economic Co-operation and Development (OECD) guidelines, *Applying Strategic Environmental Assessment: Good Practice Guidance for Development Co-operation* (OECD 2006). Two characteristics of the SEA process should be highlighted. First, SEA is a family of approaches that uses a variety of tools; it is not a single, fixed, prescriptive approach. Second, a good SEA is tailor-made for the context in which it is applied. This means that an SEA process can be designed with the existing post-conflict institutional capacity and legal framework taken into consideration, and with the option for elaboration as capacities increase or laws change.

With the growing acceptance of SEA, there are emerging views about its application in post-conflict situations (OECD 2006, 2008; Verheem et al. 2005). To date, there is limited evidence of its successful use in the development of post-conflict policies, programs, and plans. A common theme in the literature is recognition of various phases in post-conflict processes and the need to find suitable entry points for each phase (Verheem et al. 2005; OECD 2008). Rob Verheem and colleagues identify three broad areas in which SEA has a role to play in post-conflict situations: when environmental issues or natural resources are a source of conflict; when badly planned reconstruction actions may seriously damage the environment; and when environmental programming could open opportunities to strengthen cooperation, democratization, or other peacebuilding activities (Verheem et al. 2005). Given these criteria, there are few if any post-conflict situations in which SEAs would not apply.

The OECD SEA guidance suggests that a full SEA will be effective only where an institution (usually a state institution) exists in a country that has a mandate, the capacity, and the willingness to follow up on the key results of the actions agreed to in the SEA (OECD 2006). Another critical precondition for undertaking an SEA is that stakeholders are both willing and able to participate without risk. As these conditions do not often exist in a post-conflict country, the OECD has also issued a specific guidance, *Strategic Environmental Assessment (SEA) and Post-Conflict Development* (OECD 2008). This guidance describes how a streamlined SEA process can be designed to take into account the unique conditions of a post-conflict country.<sup>6</sup> The guidance specifically identifies potential entry points that could be used as the starting point for an SEA process. These include donor assistance databases, UN multi-donor trust funds, and UN work plans. The main aim of using these instruments is to identify the sectors that may cause the largest potential environmental impact so practitioners can focus on a broad set of mitigation measures or safeguards.

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<sup>6</sup> A streamlined SEA typically is conducted more rapidly, with less consultation, and may focus on fewer issues (that is, the issues of greatest significance). It also needs to make use of existing baseline data through the use of quick appraisal techniques, with less time to collect new data, let alone generate new data.

### THREE CASE STUDIES

The following sections summarize experiences and lessons learned in using donor assistance databases, UN multi-donor trust funds, and UN work plans in Afghanistan, Iraq, and Darfur, respectively. The objective of the analysis is to examine these three instruments to determine whether they provide suitable platforms and entry points for streamlined SEA or other environmental assessment processes.

#### **Afghanistan's donor assistance database, 2004–2005**

Afghanistan's 1383–1384 (2004–2005) national development budget was coordinated through its Ministry of Finance with assistance from the World Bank.<sup>7</sup> With a total value of US\$4.2 billion, the budget received most of its funding from ODA. In order to centralize, track, and coordinate donor projects, a donor assistance database (DAD) was established. In 2004–2005, the DAD included 432 projects that either had been funded or were in the process of being funded.<sup>8</sup> Within the database, an information sheet for each project was included, containing information on the budget, start and end dates, proponents, and implementation status, as well as a summary of the major outputs. Projects involved UN agencies, nongovernmental organizations (NGOs), and government ministries and bodies.

In order to understand the scope and magnitude of potential environmental impacts of the various projects, the National Environmental Protection Agency, with the support of UNEP, developed a system of environmental markers within the DAD. Each project information sheet required project proponents to categorize potential environmental impacts according to three main grades: a grade of A meant that there was potential for significant environmental impacts; a B indicated that there was potential for moderate impacts; and a C signified potential for small or insignificant impacts.

However, problems eventually arose with the consistency of the categorization process. As a result, the Ministry of Finance modified the approach and thereafter required proponents only to flag any project that may have an impact on the environment (a binary yes/no marker). In 2004–2005, a total of 188 projects out of a total of 432 (44 percent) were identified as likely to have some impact on the environment (a breakdown by sector is shown in table 1). This analysis was an important first step toward understanding the potential magnitude of environmental impacts from donor projects, as well as the distribution of those impacts among sectors. It was an essential step toward identifying the sectors most at risk and in need of further attention and analysis. However, the main limitation of the approach was that the database lacked any information on the magnitude or geographic location of each project, so it was difficult to understand which specific resources could be affected and what the cumulative impacts could

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<sup>7</sup> Afghanistan, as a Muslim country, operates on a lunar calendar.

<sup>8</sup> The author assessed the database while working for UNEP in Afghanistan.

**Table 1. Outcome of the environmental review for Afghanistan’s donor assistance database, 2004–2005**

<i>Sector and subsector</i>	<i>Number of projects</i>
<b>Energy, mining, and telecommunications</b>	<b>50</b>
Energy generation and supply	26
Mineral resources, mining, and energy	24
<b>Transport</b>	<b>41</b>
Road infrastructure	36
Other	5
<b>Natural resource management</b>	<b>75</b>
Irrigation (including emergency projects)	31
Livelihoods (food and livestock)	14
Forest, rangeland, and resource management	23
Governance and policy development	7
<b>Urban development and management</b>	<b>22</b>
Land use planning	3
Infrastructure (roads)	3
Water and sanitation	16
<b>TOTAL</b>	<b>188</b>

be. It therefore fell short of a full SEA, but it did generate important lessons. Furthermore, the political will to actually implement environmental safeguards for projects with potential impacts eventually weakened.

### **Iraq Trust Fund, 2004–2005**

Sustainable development was one of the guiding principles in the Iraq reconstruction program. The UN strategy for Iraq recognized the need to mainstream environmental and natural resources management within all operations and policies, reflecting the recent drive toward the achievement of the Millennium Development Goals (GOI and UN 2008). Building on experiences from Afghanistan, a new approach was pilot tested in Iraq. All UN projects submitted to the Iraq Multi-Donor Trust Fund (also called the Iraq Trust Fund) would undergo an environmental screening and categorization process to determine their potential impacts prior to approval. However, rather than UN agencies being asked to grade the environmental impact of their projects, proposals were evaluated by an environmental expert from UNEP, who sorted the projects into three categories: A for projects with potential for significant impacts; B for projects with potential for moderate impacts; and C for projects with potential for small or insignificant impacts. For each project, UNEP provided an analysis of the potential environmental impacts, coupled with mitigation recommendations at the project and sector levels. This approach focused on only UN agencies since these agencies would be more likely to adhere to an overall policy directive



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through the UN country team and that they would therefore comply with mitigation recommendations.

In the 2004–2005 period, the total value of the Iraq Trust Fund was estimated at US\$1.5 billion. Within this figure, a total of forty-seven UN projects representing nearly US\$350 million (23 percent of the Iraq Trust Fund budget) were assessed for environmental impacts (UNEP 2006). The forty-seven projects were divided among four main clusters: agriculture, food security, environment, and natural resource management (cluster A); education and culture (cluster B); health and nutrition (cluster D); and infrastructure and rehabilitation (cluster E). Projects in the other clusters—governance and human development (cluster C), internally displaced persons and durable solutions (cluster F), and support to the electoral process (cluster G)—either were considered to be of an urgent humanitarian nature or did not involve physical infrastructure and were therefore not assessed for environmental impacts.

The results of the assessment are listed in table 2. In total, eleven out of the forty-seven projects (23 percent) were classified as category A, while fourteen out of the forty-seven projects were category B (30 percent). According to the findings from the screening process, the three most common potential environmental impacts in the reviewed projects (over 50 percent) involved the protection of surface-water quality and quantity; the safe disposal of solid wastes; and the sustainable use of biological resources, including plants, trees, wildlife, and fisheries. Potential impacts in the areas of air quality and groundwater quality were also identified in more than 30 percent of the projects.

Although the original intention of the screening process was to help UN agencies identify and mitigate potential environmental impacts across projects and development sectors, not a single project was amended and no safeguards were adopted. The administrator of the Iraq Trust Fund eventually determined that the outcome of the environmental screening was only “for consideration” by project proponents. There was no requirement to demonstrate that potential project impacts had been mitigated, nor was the question of mitigation considered during the final project approval process. Furthermore, no efforts were conducted to address the potential environmental impacts across the main sectors, nor the cumulative effects. The UN system backed down from adhering to the Millennium Development Goals because this was not a priority of the Iraqi administration.

There are a number of additional reasons why projects were not amended to mitigate environmental impacts. First, the majority of projects were reviewed only during the approval stage and not during project design. Donors and agency headquarters had already signed off on the projects, and additional revisions would have led to significant delays—an outcome that was not desirable given the urgent needs and the pressure to meet those needs. A second reason is that the Iraq Trust Fund did not allocate funds for mitigation. Eighty percent of the Iraq Trust Fund was already earmarked, so it was difficult to increase project costs in order to address potential environmental concerns. Third, many agencies lacked the technical expertise to redesign the projects in order to mitigate environmental impacts. Finally, although some agencies noted that they would attempt to minimize

**Table 2. Outcome of the environmental review for the Iraq Trust Fund, 2004–2005**

<i>Cluster</i>	<i>Number of projects</i>
<b>Cluster A: Agriculture, food security, environment, and natural resource management</b>	<b>17</b>
Category A	2
Category B	5
Category C	10
<b>Cluster B: Education and culture</b>	<b>6</b>
Category A	0
Category B	1
Category C	5
<b>Cluster C: Governance and human development</b>	<b>N/A</b>
<b>Cluster D: Health and nutrition</b>	<b>7</b>
Category A	1
Category B	2
Category C	4
<b>Cluster E: Infrastructure and rehabilitation</b>	<b>17</b>
Category A	8
Category B	6
Category C	3
<b>Cluster F: Internally displaced persons and durable solutions</b>	<b>N/A</b>
<b>Cluster G: Support to the electoral process</b>	<b>N/A</b>
<b>TOTALS</b>	<b>47</b>
Category A	11
Category B	14
Category C	22

*Notes:* Category A: Projects with potential for significant environmental impacts. Category B: Projects with potential for moderate environmental impacts. Category C: Projects with potential for small or insignificant environmental impacts. Clusters C, F, and G were not assessed because they were considered to be of an urgent humanitarian nature or did not involve infrastructure.

impacts during the implementation process, there was no mechanism to verify this claim, so the level of compliance with this commitment is unknown.

The experience in screening UN projects supported by the Iraq Trust Fund illustrates both the potential and limitations of SEA—even streamlined SEA—in post-conflict settings. Aggregating the environmental screening results for many projects provides insights into the types of projects that are most likely to have potential environmental impacts, as well as the types of impacts that are of greatest concern. However, there was no evidence of analysis of cumulative environmental impacts—one of the central aspects of SEA. Moreover, the screening sought to inform specific projects, perhaps because most of the funding had already been allocated, so a programmatic approach would not have had as much impact as

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one that focused on the existing proposed projects. As such, the environmental-review process provided a vision of how a streamlined SEA might be pursued, even if it was not effective in this particular context.

### UN and Partners Work Plan for Sudan, 2008

Given the high level of resource scarcity and environmental degradation in Darfur, a strategy for mainstreaming environmental assessments was also pilot tested for the UN and Partners Work Plan for Sudan in 2008, covering UN and NGO humanitarian and recovery projects. UNEP environmental experts screened the projects, using the 2008 Work Plan Projects Database, and categorized the projects by sector into impact categories.<sup>9</sup> The overall objective of the screening was to identify projects that either addressed environmental needs or had the potential for environmental impacts. The intended outcome was to promote sustainable resource management across all projects and major sectors of the work plan. Feedback was provided to project proponents in each sector on the level of impact and options for environmental management, including sustainable forestry and energy management, alternative construction technologies, and integrated water resource management.

The initial review was concerned with the assessment of projects recorded in the Work Plan Projects Database and occurring in the Darfur region only. Of 197 such projects, valued at US\$935 million, 109 (55 percent), valued at US\$230 million, were identified as likely to have some environmental impact (a breakdown by sector is shown in table 3). Eventually the review process was expanded to cover the entire Sudan work plan. A total of 396 projects were identified, valued at US\$787 million (nearly 35 percent of the total work plan budget).

Aggregating the results of the environmental reviews of the various projects identified some of the most common environmental impacts. The most common potential impacts centered around the unsustainable use of groundwater, fuelwood, and construction materials, in particular near camps for internally displaced persons. The need to address the sustainable management of natural resources in support of livelihood recovery programs was also a common issue, as was waste management. Another interesting observation was that UN agencies were responsible for the larger-scale and more complex projects, while NGOs were responsible for many smaller projects. This finding had important implications for the targeting of mitigation measures.

The screening process had two major benefits. First, the UN country team and partners began to understand the potential environmental impacts of each sector and started to more systematically include environmental issues from the outset of project design. Second, groundwater monitoring finally became a common practice for all water and sanitation projects across Darfur and a key sectoral safeguard.

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<sup>9</sup> The author assessed the database while working for UNEP in Sudan.

**Table 3. Outcome of the environmental review for the Sudan Work Plan Projects Database, 2008**

<i>Sector and project description</i>	<i>Number of projects</i>	
<b>Building construction</b>	<b>25</b>	
Schools, clinics, and similar building construction		25
<b>Humanitarian</b>	<b>15</b>	
Food aid supply/agricultural substitution		2
Camp operation		1
Provision of shelter materials		12
<b>Health</b>	<b>27</b>	
Health clinic operation and mobile immunization programs		27
<b>Infrastructure</b>	<b>5</b>	
Rehabilitation or maintenance of highways or rural roads		3
Irrigation and drainage—small scale		2
<b>Livelihoods</b>	<b>7</b>	
Livestocking/veterinary programs—large scale		7
<b>Mine action</b>	<b>2</b>	
Mine action—large scale		2
<b>Water and sanitation</b>	<b>28</b>	
Rural water supply and sanitation		26
Humanitarian water supply and wastewater collection and treatment—medium to large		2
<b>TOTAL</b>	<b>109</b>	

The screening approach was replicated in the 2009 work plan. In addition, a specific budget line of US\$1 million from the Common Humanitarian Fund, known as the Green Pot, was available to kick-start new ways of mitigating the environmental impacts of humanitarian response.

The heightened environmental awareness that resulted from the screening process had a major influence on the approach taken during the drafting of the UN Development Assistance Framework (UNDAF) for 2009–2012.<sup>10</sup> Development priorities were organized according to four main pillars: peacebuilding; governance, rule of law, and capacity building; livelihoods and productive sectors; and basic services. Detailed environmental outcomes were included for each pillar, together with budgets and lists of responsible organizations and partners. The total combined natural resource management projects amounted to US\$419 million, approximately 18 percent of the total UNDAF budget (US\$2.3 billion).

<sup>10</sup> UNDAF is an understanding between the UN country team and a host-country government regarding activities deemed to be the most effective in achieving national development goals.

## LESSONS LEARNED

All three cases demonstrate that these instruments—donor assistance databases, UN multi-donor trust funds, and UN work plans—can be an initial starting point for conducting environmental assessments in post-conflict situations. This includes both screening for project-specific impacts and aggregating those reviews into broader sectoral assessments—a process that may lead to an SEA or a de facto streamlined SEA. At the very least, the proportion of projects that may have an environmental impact can be identified, together with the key sectors and actors. However, transforming this information into a full SEA leading to changes in plans, policies, and programs has been more challenging.

One of the main challenges relates to information accuracy and consistency of impact grading. The accuracy of each grade depends on the quality of the data supplied by a range of stakeholders, as well as a common understanding of what constitutes an environmental impact. In Afghanistan, project information sheets contained wide variation in the amount of project information that was provided. Although practitioners were required to flag projects that would have some impact on the environment, there was often inadequate guidance about what constituted an impact. Also, practitioners who believed that a high grade could lead to project delays may have had an incentive to misclassify their projects. The many project managers from various agencies and NGOs also varied in their technical competence and attitudes toward environmental mainstreaming; this also led to a great deal of variation in the tendency to flag projects for potential environmental impacts.

Where UNEP undertook the classification of projects, as it did in Sudan and Iraq, a consistent categorization approach was developed. However, in many cases, project information sheets and associated project documents did not contain sufficient information to make an accurate classification. In particular, the precise geographic locations, scale of the projects, and environmental baseline conditions were not included.

The downside of using an external entity to conduct a screening process for environmental impacts was also revealed when the number of projects exceeded a certain threshold. Screening forty-seven projects in the Iraq Trust Fund was manageable for a single expert, but screening all 396 projects in the Sudan work plan was not. Furthermore, many of the projects require screening in parallel, rather than sequentially, and thus require a significant increase in screening capacity. Third-party screening can also shift responsibility away from project proponents. If proponents are not involved in the classification process and do not take some level of ownership at the outset, it is possible that they will not undertake environmental mitigation measures during project implementation.

Another challenge relates to the selection of projects to include in the screening process. In both Afghanistan and Iraq, all projects of a humanitarian nature were excluded from the screening process, even if they had potential implications for environmental factors such as water quality. Because humanitarian projects were considered life-saving in nature, potential approval delays

caused by the need to mitigate environmental impacts were not seen as justifiable. This mind-set eventually changed with the Sudan work plan, when all projects, both humanitarian and recovery, were included in the screening process. One of the main lessons learned from Darfur is that humanitarian operations associated with camps for internally displaced persons have significant environmental impacts caused by unsustainable use of groundwater, fuelwood, and construction materials. The mitigation of those impacts in subsequent years demonstrated the utility of the screening process—and shaped programmatic development and delivery.

Finally, this analysis revealed that basic environmental management requirements are poorly integrated into donor and UN projects, despite higher-level policy directives and commitments to sustainability. Myriad recovery projects have been implemented in which the majority of proponents had little or no exposure to environmental training or the sustainable management of natural resources. Furthermore, even when potential environmental impacts of projects and sectors were identified by third parties and technical assistance was offered to mitigate impacts, few proponents changed their project design. In the case of Iraq, UN agencies were not required to adopt mitigation plans prior to project approval, despite a high-level commitment to sustainability within the overall work plan. Furthermore, no monitoring or compliance mechanisms were in place for project proponents who did make specific mitigation commitments.

If these screening instruments are to be used as the entry points for conducting post-conflict environmental assessments in the future, several conditions need to be met. First, a consistent way to categorize environmental impacts needs to be established at the outset, together with a clear allocation of responsibility. Ideally, project proponents should be required to undertake the classification and to consider environmental issues at the outset of project design. Only when an insufficient number of proponents have the capacity to conduct the classification should third parties take responsibility.

Second, all projects—humanitarian as well as recovery and development—should undergo environmental screening. This screening is important both for reducing the environmental side effects of the projects and for guiding sectoral approaches. Systematic screening of all projects and aggregation of the screening results will help to identify the projects and sectors that are most in need of environmental mitigation.

Third, additional information should be incorporated into project information sheets, in particular simple geographic coding. This would allow a more fine-scale review of geographic areas where projects are to be concentrated and a better analysis of potential impacts and cumulative effects.

Finally, national stakeholders need support to identify and mitigate the environmental risks inherent in relevant sectors and to develop capacity for compliance monitoring. Environmental screening and SEA can be initial starting points for mitigating environmental impacts at the sector level, but a broader policy of project-specific EIA should eventually be adopted. Capacity-building

programs should keep longer-term EIA needs in mind as SEA approaches are developed.

## **CONCLUSIONS**

When ODA to a post-conflict country reflects national policy priorities, a basis can be created for an effective reconstruction strategy that is supported by a well-coordinated aid-management architecture (Schiavo-Campo 2003). However, the rapid disbursement of financial resources on a large scale to alleviate urgent humanitarian needs and to support post-conflict recovery and reconstruction often generates environmental risks. This chapter has reviewed alternative approaches to assessing and mitigating environmental risks, together with potential entry points.

In most post-conflict countries, establishing a traditional project-based EIA system is not feasible or is inhibited by weak legal, policy, and technical capacity. Nascent environmental protection agencies that lack political authority and financing often struggle with cumbersome EIA processes. Baseline data on the environment have often been lost or destroyed or are not current, and there is often little political will to establish environmental safeguards. Members of the private sector often fail to understand the benefits of EIA processes. Finally, public participation is often lacking, and people tend to be unaware of their rights concerning natural resources. It can take ten years, or more, to establish a functional EIA system that is integrated into the fabric of governance and applied as a decision-making tool.

Unless significant additional technical resources are provided, traditional EIA approaches will not be prepared to grapple with the large inflows of ODA that occur in post-conflict periods. The application of tailor-made environmental assessment approaches is an alternative model.

This chapter has reviewed lessons learned from using donor assistance databases, UN multi-donor trust funds, and UN work plans as entry points to screen for major environmental impacts across project sectors. These sectors can be identified on the basis of the number, location, and type of projects being undertaken. The process enables practitioners to recognize the main environmental risks associated with each sector so they can establish a range of environmental safeguards. Streamlined SEA processes can also help to identify substantial cumulative effects of plans, programs, and policies—especially in a particular sector—that might be missed in a process that only considers potential impacts of individual projects. Such approaches could aid in the integration of sustainability efforts into post-conflict development and could be an important step toward the achievement of 2005 Paris Declaration aims and the Millennium Development Goals. In implementing a streamlined SEA, however, it is essential that the assessment be undertaken sufficiently early in the process that it can inform the development and implementation of the plan, program, or policy.

Use of the instruments assessed in this chapter is one approach for identifying priority sectors and issues. There is definitely scope for developing other approaches with broader social and environmental aims. Whatever methods are employed, they need to be flexible and must be undertaken within relatively rapid time frames, given the dynamic pace of post-conflict development.

ODA tends to operate according to neoliberal principles of development, prioritizing the establishment of a market-oriented economy in fledgling democracies recovering from conflict. Where natural resources are abundant, there is often a reliance on commercial exploitation of these resources to drive growth and stability in an insecure environment, and social and environmental considerations can often be overlooked, with negative consequences for communities and livelihoods. If there is to be a shift in the development paradigm in post-conflict situations toward sustainability, there is a pressing need for environmental assessments (including SEAs) to be applied to ODA. Reviews of donor assistance databases, UN multi-donor trust funds, and work plans can help to identify risks and inform sector-wide mitigation approaches. This strategy should be further developed, with commitments from donor countries, aid agencies, NGOs, the UN system, and recipient governments.

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