

Mainstreaming Environment
into Humanitarian Interventions
– A Synopsis of Key
Organisations, Literature and
Experience



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Executive Summary

This study reviews a selection of materials on the environment and humanitarian interventions, including disasters and conflict. The review focuses on:

- Who is active in the field of environment and humanitarian response, and,
- What exists in terms of knowledge development and application to effectively manage environmental concerns during humanitarian interventions?

The materials reviewed are not comprehensive but expected to be sufficient to identify the key actors and knowledge in the environment-humanitarian intervention nexus. The materials assembled in this study are expected to be of use to Environment-Humanitarian Sector Advisors in supporting humanitarian operations.


The study results indicate no dispute that the environment is important to effective humanitarian interventions. Broad, and increasing, efforts are being made to develop tools and capacities to define and address the environmental aspects of humanitarian interventions. These efforts confirm a widely held view that *“Mainstreaming environmental considerations in to humanitarian interventions ...not only increases the long-term sustainability of projects and programmes but can also achieve other benefits including cost savings, disaster risk reduction, gender equity, food security, and energy efficiency, among others”*, a hypothesis set out in the study terms of reference.

The information reviewed also indicates that the second statement set out in the terms of reference, that *“The failure to address environmental considerations within humanitarian interventions, can lead to a web of unintended adverse impacts on people and environment, which may threaten the long term sustainability of interventions and recovery processes”* is generally held to be true across actors involved in the environment-humanitarian assistance nexus.

However, evidence of these unintended adverse impacts threatening sustainability is scarce in the formal literature. Post-operations evaluations of environmental impacts appear to be rare, with information on successes and failures apparently confined to the grey literature and informal reporting. The exceptions are work by UNHCR and others on the impact of refugees, particularly in Africa, (see UNHCR, no date, 2009a, 2009b, 2005b, 2002a, 2002b, and 1998b, and US Agency for International Development, 2007) and Black (1998). Focused assessments of the impact of conflict on the environment have also been developed by the United Nations Environment Programme (see United Nations Environment Programme, no date a, no date c, 2007a, 2007b, 2006a, 2006c, 2006d, 2005, 2004b, 2003c, 2002, 2001, 2000a, 2000b, 1999). Other impact-related works likely exist, particularly in the grey literature, but could not be accessed during the time allotted for this study.

A report by Environmental Resources Management (1994) calls attention to the difference between short term, transient, environmental damage and longer term significant negative environmental impacts. Not all environmental damage is irreversible, and some, under the humanitarian imperative, may be necessary and acceptable.

In fact, some detailed studies of refugee displacements indicate that there are unfounded expectations of environmental damage, that is the scale of impact, or cause of impact may be overstated (Black, 1998). In Tanzania, concerns about Rwandan refugees cutting trees diverted attention from other, more serious, environmental health issues that were reported to have cost lives (Environmental Resources Management, 1994).



The work of the **Environmental Peacebuilding** initiative¹ may provide more evidence on which to base the argument for environment-humanitarian intervention integration. The articles being produced under this effort should be reviewed to gain a greater insight into the actual nature of conflict-related environmental impacts.

From the materials reviewed, the gap in addressing environmental issues in humanitarian interventions is due to three factors:

1. Different understandings of what the word “environment” covers. For the **Joint UNEP/OCHA Unit**, the focus has been on hazardous chemicals and industries. For **UNHCR**, the focus currently is on camps, stoves and lights (UNHCR, 2012). For **ICRC**, the focus includes quality of life, social equity as well as demonstrating best practice and being economic in spending funds (International Committee of the Red Cross, 2012). The **Humanitarian Charter and Minimum Standards in Humanitarian Response** (The Sphere Project, 2011) use a definition that focuses on human interaction with a broadly defined environment. These understandings need to be bridged and eventually harmonized for it to be clear on how humanitarian interventions should address the environment.
2. A weak (or poorly documented) evidence base to justify why paying attention to the environment in humanitarian interventions is critical. The conceptual and policy arguments are strong. But those at the implementation level need to be confronted with evidence that poor consideration of the environment leads to poor results, and greater hardship to survivors. Evidence with relation to refugees is relatively strong, but it is not clear that this evidence is consistently applied to analogous IDP situations. Clearly defining the economic and human cost of not considering the environment is also a strong argument for considering the environment in interventions.
3. Defining environment as a cross-cutting issue reduces immediate relevancy to humanitarian interventions.² The target should be integration, so that solar water heaters or rainwater harvesting are not seen as exotic tree hugging, but normal and expected in a humanitarian intervention.

These three factors do not create a bar to the work of an Environment-Humanitarian Sector Advisor. In fact, as happened with the Shelter Cluster Environment Advisors in Haiti and Indonesia, the presence of an Advisor raised the profile of environment and focused attention on how to address environmental issues as part of relief and recovery operations. However, the success of an Advisor requires three issues to be addressed to successfully assess, plan and implementing sustainable humanitarian interventions. Otherwise, there is already a significant volume of materials, processes, techniques and tools that can be used to integrate the environment into humanitarian operations.

There are four things missing to effectively incorporate environmental issues into humanitarian assistance:

¹ <http://www.environmentalpeacebuilding.org/>.

² The observation that being a cross-cutting issue is a ‘kiss of death’ as no one is directly responsible for ensuring the issue was addressed was made in the context of disaster risk reduction as a cross-cutting issue. However, the same point holds for the environment and is reflected in the fact that other cross-cutting issues have transitioned into an operational footing, as in the case of protection or gender, to be more effective. Also see UN Office for Coordination of Humanitarian Affairs (no date) for a further discussion of cross-cutting issues and humanitarian assistance.



- A more strategic approach to considering sector-level environmental issues in humanitarian assistance, to identify where environmental problems are most likely.
- Follow-through by donors to ensure environmental considerations are included in proposals and operations.
- Real time monitoring and evaluation of the environmental consequences.
- Greater accountability for environmental consequences.

Operationally, three needs (in addition to on-going capacity building) are:

- A centralised accessible repository of materials in environment and relief and recovery.
- Development of short and focused topical packages on environment-humanitarian assistance tools and procedures, so that knowledge acquired can quickly be accessed at the field level.
- More evidence of good and bad practices to incorporate into lessons learned and to guide decision making at the programme and implementation levels.



SECTION I

Introduction

This study provides a synopsis of key organisations, literature, reports and experiences related to the mainstreaming of the environment into humanitarian interventions. The study seeks information to assess the following two statements:

- *Mainstreaming environmental considerations in to humanitarian interventions, both in emergency response and in recovery phases, not only increases the long-term sustainability of projects and programmes but can also achieve other benefits including cost savings, disaster risk reduction, gender equity, food security, and energy efficiency, among others.*
- *The failure to address environmental considerations within humanitarian interventions, can lead to a web of unintended adverse impacts on people and environment, which may threaten the long term sustainability of interventions and recovery processes.*


The report is organised into six sections:

1. Introduction
2. Organisations involved in the environment-humanitarian nexus
3. Policy and guidance on the integration of environmental issues into humanitarian interventions
4. Key tools for the integration of environmental issues into humanitarian interventions.
5. Next Steps
6. Bibliography

One challenge in developing the report is the diversity of subject matter that can be included under the term “environment”, ranging from livelihoods impacts of relief to toxic chemical releases, to siting post disaster housing in flood zones. In contrast, health or agriculture are more focused and clear as areas of intervention (and definable results).

Further, environment is relevant across a broad range of efforts in the continuum from disaster preparedness to relief to recovery. In the context of this paper, it is presumed that the word “humanitarian” defines not only immediate relief, but also a range of post disaster assistance provided through recovery or to long-term stabilized displacements (e.g., Palestinian refugees in Lebanon). Pre-crisis actions are also logically, if not traditionally, part of the humanitarian intervention equation.

The operational link between humanitarian operations and the environment is somewhat framed by whether these operations are rapid or protracted. Where the direct impact of a disaster occurs rapidly, as with an earthquake, immediate search and rescue and lifesaving operations also take place quickly and environmental issues can be transitory. However, for protracted events, for instance an extended displacement, environmental impacts accumulate over time and as a consequence of early decisions on how assistance is to be provided. Thus, while post-earthquake rescue and relief may have limited environmental impacts, the process of recovery can lead to significant negative, or positive, environmental impacts.



As a result, decisions on recovery assistance can lead to negative environmental impacts some time after the initial decision, often when the initial decision makers are no longer present. This situation most often develops when environmental reviews are not done as part of the recovery process, or when the results of these reviews are not incorporated into recovery plans and activities.

The report format is heavily bibliographic, reflecting the diversity of sources of information relevant to the two statements and that an eventual Environment-Humanitarian Sector Advisor would need access to a wide range of materials to respond effectively to the diverse ways that environment and humanitarian interventions can be linked.

The study was developed using a combination of directed literary research starting with known key literature, key term searches of the World Wide Web, snowball searches for information through emails to key sources (the latter focused on the grey literature) and contacts with professionals in the field.³ In general, the focus was on areas and experiences outside the North Atlantic region.

³ These sources included participants at the Advisory Group on Environmental Emergencies (May 2013) and Environmental Dimensions of Sustainable Recovery Project second workshop (June 2013).



SECTION II

Organisations involved in the Environment-Humanitarian Nexus

A. Overview

Many humanitarian and environmental organisations are involved in the environment-humanitarian intervention nexus at the operational level. The following organisations are in the forefront in the development of policy and practice related to the environment-humanitarian intervention nexus. The list does not include country-level organisations, which often work below the attention of the humanitarian intervention structure, but can be of local significance. The **Global Shelter Cluster**, **WASH Cluster** and **Camp Coordination and Camp Management** and **Logistics** Clusters are covered in a single section, below.

B. Joint UNEP/OCHA Environment Unit

The **Joint United Nations Environment Program/Office for the Coordination of Humanitarian Assistance Environment Unit** (<http://www.unocha.org/what-we-do/coordination-tools/environmental-emergencies>) based in Geneva provides support to UN members on preparing for and responding to environmental emergencies as well as working in support of OCHA on the coordination of the response to the environmental aspects of disasters. While the **Joint Unit** rests within OCHA in Geneva, part of the staff is provided by UNEP and this engagement is separate from the UNEP Post Conflict and Disaster Management Branch, also in Geneva (see below).

The **Joint Unit** has developed a number of assessment tools and produced a number of assessment reports (see below) and is currently setting up an on-line Environmental Emergencies Centre (<http://www.eecentre.org/>). The **Joint Unit** hosts a bi-annual Advisory Group on Environmental Emergencies (AGEE) meeting (last meeting April 2013) and works closely with the **Swedish Civil Contingencies Agency** (see below).

Traditionally, the **Joint Unit** has focused on technological disasters (environmental emergencies) such as oil spills and industrial accidents. They have been involved in cluster coordination on environmental issues after major disasters (e.g., Pakistan earthquake) but normally focus in immediate hazardous materials issues and not a wider set of environmental issues present after a disaster. However, the **Joint Unit** mandate has expanded recently to take in a broader coverage of disaster-related environmental issues as well as building capacities to manage environmental aspects of disasters. e.g. training components of the Environmental Emergencies Centre (UN Office for Coordination of Humanitarian Affairs, no date).

C. Post Conflict and Disaster Management Branch, UNEP

The **Post Conflict and Disaster Management Branch (PCDMB)**, (<http://www.unep.org/disastersandconflicts/>) United Nations Environment Programme, is based in Geneva and focuses on:



- Post crisis assessments,
- Post crisis environmental recovery,
- Environmental cooperation for peacebuilding and
- Disaster risk reduction.⁴

PCDMB currently has projects in Afghanistan, Cote d'Ivoire, DR Congo, Haiti, Nigeria, Sierra Leone, South Sudan and Sudan. In a number of cases, **PCDMB** has become involved in a country immediately following a disaster or crisis, often starting with an assessment and followed up with more specific projects and activities to promote recovery and disaster risk reduction.

For instance, in Haiti, **PCDMB** became involved after the storms of 2008, and developed recovery programmes focused on environmental issues. The local **PCDMB** operation established in Haiti following the floods was then involved in the initial assessment of environmental impacts following the 2010 earthquakes (Post-Conflict and Disasters Management Branch, 2010) and developed a number of projects and activities to address natural hazard risk related environmental issues in the country⁵. The latest details on current operations are available at

<http://www.unep.org/disastersandconflicts/CountryOperations/UNEPsCurrentActivities/tabid/54617/Default.aspx>.

PCDMB (and predecessors) has also been involved in a number of post-conflict efforts, including Liberia⁶, Iraq, Lebanon, Rwanda and the conflicts in the Balkans.⁷ A list of reports on the impacts of war on the environment can be found in the **PCDMB/UNEP Post Conflict Assessment Reports** box, below. Details on past activities are available at <http://www.unep.org/disastersandconflicts/CountryOperations/UNEPsPastActivities/tabid/54618/Default.aspx>.

Other noteworthy **PCDMB** efforts have included the **Sudan Post-Conflict Environmental Assessment Report** (United Nations Development Program, 2007b), a broad and extensive review of environmental issues in Sudan. **PCDMB** also established a 'one-stop' Web source for information about environmental and humanitarian issues.⁸ Active updating of the site has stopped but the site remains a key source for documents related to environment and disasters, conflicts and humanitarian assistance. The **PCDMB** will likely be eventually surpassed by the **Joint Unit Environmental Emergency Centre** site (<http://www.eecentre.org/>) as the primary source of information on environment and emergencies.

PCDMB has often faced challenges with becoming operational in a specific country or post disaster/crisis context. Other **UN** agencies, particularly, **UNDP** and **UNOPS**, already may have existing operational capacities in a country. The cost and effort needed to establish a separate **UNEP** office can result in **UNEP**-developed efforts being transferred to other **UN** agencies. Where funds are available, as in Haiti, Afghanistan and Sudan, **UNEP** offices can open and **PCDMB** projects can be implemented directly. It often appears that funding for


⁴ Drawn from <http://www.unep.org/disastersandconflicts/Introduction/tabid/51921/Default.aspx>.

⁵ See <http://haitiinnovation.org/en/2011/01/07/south-coast-environmental-initiative-launched>.

⁶ See <http://www.unep.org/disastersandconflicts/Publications/LiberiaPublications/tabid/54728/Default.aspx>.

⁷ To access the full range of reports prepared by **PCDMB**, go to <http://postconflict.unep.ch/about.php?prog=&show=current>, click on a current or past country programme and then on the Publications tab.

⁸ <http://postconflict.unep.ch/humanitarianaction/>.



PCDMB's efforts is constrained by the view that environmental issues are secondary to an overall humanitarian response.

UNEP, via PCDMB, has served as the coordinator of the Cluster Approach cross-cutting focus on environment. Recent information indicates that this responsibility may now be more directly managed by the **Joint Unit**.

PCDMB/UNEP Post Conflict Assessment Reports

- **A Rapid Assessment of the impact of the Iraq-Kuwait Conflict on Terrestrial Ecosystems:**
Part One: The Republic of Iraq (Gaafar, et al, 1991a), **Part Two: The State of Kuwait** (Gaafar, et al, 1991b), **Part Three: Saudi Arabia** (Gaafar, et al, 1991c)
- **The Kosovo Conflict: Consequences for the Environment and Human Settlements** (UNEP, 1999)
- **Post-Conflict Environmental Assessment – Albania** (UNEP, 2000)
- **Post-Conflict Environmental Assessment – FRY of Macedonia** (UNEP, 2000)
- **Depleted Uranium in Kosovo: Post Conflict Environmental Assessment** UNEP, (2001)
- **Depleted Uranium in Serbia and Montenegro - Post-Conflict Environmental Assessment in the Federal Republic of Yugoslavia** (UNEP, 2002)
- **Afghanistan: Post Conflict Environmental Assessment** (UNEP, 2003a)
- **Desk Study on the Environment in Iraq** (UNEP, 2003b)
- **Depleted Uranium in Bosnia and Herzegovina: Post-Conflict Environmental Assessment** (UNEP, 2003c)
- **Environment in Iraq: UNEP Progress Report** (UNEP, 2003d)
- **Desk Study on the Environment in Liberia** (UNEP, 2004a)
- **From Conflict to Sustainable Development: Assessment and Clean-Up in Serbia and Montenegro** (UNEP, 2004b)
- **Assessment of Environmental “Hot Spots” in Iraq** (UNEP, 2005)
- **Lebanon: Post-Conflict Environmental Assessment** (UNEP, 2007a)
- **Sudan Post-Conflict Environmental Assessment** (UNEP, 2007b)


D. UNHCR

UNHCR has been involved in addressing refugee-related environmental issues for close to twenty years. As the **Cluster** lead for shelter for refugees and internal conflict, co-lead with **IOM** for camp coordination and camp management, and as a leading funder of relief and support operations, **UNHCR** is critical to defining the salience and resources allocated to environmental issues.

UNHCR has accumulated a wealth of experience and information on environmental issues related to camp management, particularly in East Africa. Information on **UNHCR's** work can be found at <http://www.unhcr.org/pages/49c3646c10a.html>, with more background information available at <http://www.unhcr.org/3b039f3c4.html>.

Note that **UNHCR's** web site has undergone changes that have resulted in some of their environment-linked materials not being easily accessible. The following list, copied <http://www.unhcr.org/3b94c8364.html>, with notes from the original and active links where appropriate, provides comprehensive listing of the environment-focused work by **UNHCR** over the years.

- [Environmental Guidelines](#) (UNHCR, 2005).
- [Handbook of Selected Lessons Learned from the Field: Refugee Operations and Environmental Management](#) (UNHCR, 2002) (2nd edition of [Refugee Operations and the Environmental Management: Selected Lessons Learned](#)).
- [Handbook of Experiences in Energy Conservation and Alternative Fuels: Cooking Options in Refugee Situations](#) (UNHCR, 2002). [Also available in French.]
- [Handbook for Promoting Sound Agricultural Practices: Livelihood Options in Refugee Situations](#) (UNHCR and CARE International, 2002). [Also available in French.]
- [A Handbook of Sound Practices: Forest Management in Refugee and Returnee Situations](#) (UNHCR, 2005).
- [A Practical Handbook for Improved Management: Livestock-Keeping and Animal Husbandry in Refugee and Returnee Situations](#) (UNHCR, 2005).
- [Environmental Considerations for Camp Phase-out and Closure: A UNHCR Plan of Action](#) (UNHCR 2009).
- [Environmental Perspectives of Camp Phase-out and Closure: A Compendium of Lessons Learned from Africa](#) (UNHCR, 2009).
- [Practicing and Promoting Sound Environmental Management in Refugee/Returnee Operations – Papers presented at an International Workshop, Geneva, 22-25 October 2001](#) (UNHCR, 2002). [Also available in French.]
- [Caring for Refugees – Caring for the Environment](#) (UNHCR, 2001). [Also available in French and Spanish.]
- [Refugee Operations and Environmental Management: Key Principles for Decision-Making](#) (UNHCR, 1998). [Also available in French.]
- [Refugee Operations and the Environmental Management: Selected Lessons Learned](#). (UNHCR,1998). [Also available in French.]
- [Partnership Workshop: Environmental Management of Refugee Operations. Proceedings of a Workshop held at the Palais des Nations, Geneva, 20-22 September 1997](#) (UNHCR, 1998).
- [Environmentally Friendlier Procurement Guidelines and Background Paper](#) (UNHCR, 1997). [Also available in French.]
- [Refugees and the Environment. Caring for the Future](#), (UNHCR, 1997). [Also available in French and Spanish.]
- [Refugee Environmental Education Pilot Project in Kenya \(REEPP-KENYA\): Project Report](#) (Muigai, no date).
- [Household Energy Use in Refugee Camps of Eastern Zaire and Tanzania: The Experiences of UNHCR and Its Implementing Partners](#) (Umlas, no date).
- [The Experience of UNHCR and Its Partners with Solar Cookers in Refugee Camps](#). (Umlas, no date).
- [International Symposium on Environmentally Induced Population Displacements and Environmental Impacts Resulting from Mass Migrations](#) (International Organisation for Migration, no date).
- [Energy Consumption in the Refugee-Hosting Areas of Kagera Regions, Tanzania: Status and Trends](#) (UNHCR, no date).
- [Environmentally Friendlier Procurement. Specifications for: Potentially Hazardous Chemical Materials, Ozone Depleting Substances, Office Paper and Computer Equipment, Cooking Equipment, Asbestos](#) (Ross, 1996).
- [Energy Consumption in the Refugee-Hosting Areas of Kagera Regions, Tanzania: Status and Trends](#) (Owen, M. and Barugahare M., 1996), UNHCR.
- [Economic and Financial Assessment of UNHCR's Environmental Policies](#) (Ruzicka, 1995), UNHCR.
- [Refugee Environmental Education: A Concept Paper](#) (Talbot,1995). [Also available in French.]

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- **Development of a GIS System in UNHCR for Environmental, Emergency, Logistic and Planning Purposes** (Bouchardy, 1995).

UNHCR is currently focusing on lighting and improved cooking stoves. The effort, called “Light Years Ahead” focuses on providing:

- Solar-powered battery lights to improve night-time safety and activities such as reading by school children and
- “Save80” fuel efficient cook stoves, insulated heat box and pots (UNHCR 2012).

The programme focuses on donations to cover costs of the assistance provided, which appears to be primarily focused on refugees in Africa.

UNHCR is one of the organisations with the most continuous engagement in environmental issues related to humanitarian operations. Selected lessons identified in the **Handbook of Selected Lessons Learned from the Field: Refugee Operations and Environmental Management**, (UNHCR, 2002), and which are applicable to humanitarian interventions in general⁹, include:

⁹ Note that many humanitarian crises or disasters involve population displacements



- “Environmental problems occurring in the emergency phase continue into other phases ... and typically become more costly to address.”
- “Development-type funding sources become increasingly appropriate as humanitarian emergencies become long-term settlement operations.”
- “Options for funding post-repatriation environmental rehabilitation need to be considered as early as possible, and all relevant actors brought into the planning process.”
- Where possible, and according to capacity, local organisations should be identified to implement environmental activities”
- “Responsibility for co-ordinating environmental activities should be clearly assigned.”
- “Conflict may arise over the need to act quickly to address environmental concerns, and attempts to ensure proper co-ordination, efficiency, technical competence and monitoring.”
- “Enabling participation and empowerment requires commitment and patience from donors and implementing partners.”
- “Local participation is better assured if environmental strategies are presented as being development programmes for the local communities.”
- “Local level resource management institutions are not always visible, and need to be carefully identified.”
- “The adverse environmental impacts of hosting refugees often run far deeper than visible degradation, and can affect local institutions.”
- “Assuring full government participation in environmental initiatives fosters good relations.”
- “Simply targeting women may increase their workload and undermine the real purpose of gender initiatives.”
- “The collection of baseline environmental data prior to (and during) the emergency phase greatly facilitates subsequent impact assessment.”
- “Information on a small number of key environmental features is normally sufficient for contingency planning.”
- “Clear definition and analysis of environmental problems is essential for the design of a successful mitigative strategy.”
- “Multi-disciplinary approaches are more likely to lead to accurate problem definition and analysis.”
- “Many environmental activities can begin immediately during the emergency phase, with a comprehensive environmental action plan to follow later.”
- “Refugees have various coping mechanisms in response to their food, energy and economic situation, which should be monitored closely to minimise any environmental repercussions.”
- “From an environmental perspective, settling refugees with local communities is preferred over camp situations.”
- “If environmental management capacity can become an established standard during an emergency, environmental issues will be less easily overlooked and more consistently considered.”
- “Cheap and simple methods can be used to encourage environmentally-friendly shelter construction right from the start.”
- “Energy-saving devices should be earned, not given.”
- “The right cooking techniques can save as much energy as the right technologies.”
- “Income-generating activities can encompass the sustainable use of natural resources.”
- “Refugees’ residential plots are a potentially valuable source of fresh food, fruit and small stock, if properly managed. Such productivity goes hand-in hand with sound environmental management.:
- “Community-based natural resource management (CBNRM) is the most sustainable environmental protection strategy in the long-term.”

- “Rehabilitation of protected areas is particularly costly. Emphasis should

therefore be on prevention rather than cure.”

E. World Wildlife Fund¹⁰

WWF/US, together with other environmental NGOs, was involved a USAID-funded project focusing on conflict and environmental issues from 1988 to 2001 (see Shambaugh, et al, 2001).

Following the 2004 South Asia Tsunami, **WWF/US** developed a collaboration with the **American Red Cross (ARC)** to integrate environmental awareness and considerations into the **ACR** post-tsunami recovery programme. This Humanitarian Partnerships collaboration resulted in a number of screening and guidance documents and eventually the development of the **Green Recovery and Reconstruction: Training Toolkit for Humanitarian Aid (GRRT)** (2010).

More recently, **WWF/US** has been working with **ARC** in Haiti on integrating environmental considerations into recovery activities. This collaboration includes technical support and training using the **GRRT**.

The **GRRT** (available at <http://green-recovery.org/>) includes 10 modules covering:


1. ***Opportunities after Disasters: Introduction to Green Recovery and Reconstruction***
2. ***Project Design, Monitoring and Evaluation***
3. ***Environmental Impact Assessment Tools and Techniques***
4. ***Green Guide to Strategic Site Selection and Development***
5. ***Green Guide to Materials and the Supply Chain***
6. ***Green Guide to Construction***
7. ***Green Guide to Water and Sanitation***
8. ***Green Guide to Livelihoods***
9. ***Green Guide to Disaster Risk Reduction***
10. ***Greening Organisational Operations***

Each module includes a content guide, trainer’s guide and training presentations. In some cases, the content guides present module-specific information on recovery which had not previously been assembled in a single source.

The **GRRT** has been used in Indonesia, Sri Lanka, Chile, Haiti, India, Pakistan, Thailand, and New Zealand (training). **WWF/Pakistan** has sponsored a **GRRT**-based training and also engaged a national staff member as a Disaster Response Environmental Partnership Specialist. In Chile, the **GRRT** was used to review recovery plans and contributed to the design of community-based recovery plans. Discussions are underway on the development of an 11th module on environmentally sound recovery following conflict.

WWF is currently involved in a project funded by USAID on developing a manual on watershed-focused, eco-systems-based community flood management and, together with the American University, the **Environmental Dimensions of Sustainable Recovery: Learning from Post-Conflict and Disaster Response Experience** project funded by the

¹⁰ The author has worked for **WWF** on the **GRRT** development and use and on the flood manual, and is also involved in the **Environmental Dimensions of Sustainable Recovery** project.



U.S. Institute of Peace.¹¹ The former project should deepen the disaster prevention and management aspects of the **GRRT**, while the latter contribute to the possible 11th module of the **GRRT**.

F. Group URD

Group URD (<http://www.urd.org/?lang=en>) is a French-based NGO that has been involved in humanitarian assistance and environmental issues as well as other humanitarian-related topics. **Group URD** has been active in promoting sustainable and environmentally efficient technologies for use in disasters (e.g., solar stoves) and promoting an awareness of the environment in the humanitarian context and conducting a number of research and assessment efforts (see http://www.urd.org/spip.php?page=mot&id_mot=35&lang=en).

Group URD collaborated with UNEP/PCDMA on the development of a training programme on environmental issues and humanitarian assistance: **Mainstreaming the Environment in Humanitarian Action** (<http://www.urd.org/Course-Mainstreaming-the>). The training includes modules on the following topics (embedded links provided for ease of access):

- [Module 1: Training overview](#)
- [Module 2: Key environmental concepts](#)
- [Module 3: Humanitarian action and the environment](#)
- [Module 4: Sustainable water management and ecological sanitation](#)
- [Module 5: Waste management](#)
- [Module 6: Reduction of and alternatives to the use of firewood](#)
- [Module 7: Livelihoods and the environment in rural contexts](#)
- [Module 8: Humanitarian logistics and the environment](#)
- [Module 9: The environment and the project cycle](#)
- [Module 10: Adopting an environmental approach throughout an organisation](#)
- [Module 11: Training wrap-up](#)
- [Reference documents](#)

The training is available in French and English. Pilot trainings were conducted in southern Africa and **Group URD** has offered the training (in French) on a short course basis in France. Training in English is also available on request. As of July 2013, the **Joint Unit** and **Group URD** are planning additional trainings.


G. Swedish Defence Research Agency (“FOI”)¹²

The **Swedish Defence Research Agency (FOI)** includes a *Division of CBRN Defence and Security* that has been working on environmental and health issues as they relate to military operations for more than a decade. The **FOI** unit has been involved in development of deployment guidance on environmental issues (e.g., for peace keeping operations in a specific country), collaboration with **UN Department of Peace Keeping Operations (DPKO)**, **NATO** and others on environmental guidance for peace-related operations and technical support to **MSB** (see below). The **FOI** unit uses the concept of *environmental intelligence* to collect and analyse data about environmental issues related to a deployment and uses this analysis to define environmental risks and opportunities.

Recently, **FOI** has been supporting **UN DPKO** and Swedish operations in Sudan and South Sudan on incorporating environmental issues into operations (e.g., through training and

¹¹ Contact Ken Conca of American University (conca@american.edu) and Anita Van Breda of the World Wildlife Fund (Anita.VanBreda@wwfus.org) for more information on this project.

¹² Based on information provided by *Division of CBRN Defence and Security, FOI*.



policy guidance) and facilities operations (e.g., siting, construction and community relations). **FOI** has been commissioned to draft an **Environmental Handbook** for the Swedish Civil Contingencies Agency (**MSB**). **FOI** expertise is available through **MSB** to the humanitarian community.

Key **FOI** outputs include:

- Best Environmental Practices for Military Compounds in NATO Operations (AJEPP-2) NATO STANAG 2582 EP (Ed 1).
- Environmental File for Military Compounds (AJEPP-6) NATO STANAG 6500 EP.
- Allied Joint Medical Intelligence (AJMedP-3) NATO STANAG 2547 (Ed 1).
- Deployment Health Surveillance (AMedP-21) NATO STANAG 2535 (Ed 1).
- EU Environmental Policy for Operations (European External Action Service, 2012)
- European Union Military Concept on Environmental Protection and Energy Efficiency for EU-led military Operations (14 September 2012).
- Environmental Guidebook for Military Operations, drafted together with United States and Finland and used by Swedish Armed Forces, UN, EU and NATO. (see http://www.foi.se/Global/V%C3%A5ra%20tj%C3%A4nster/Camp%20Solutions/Guidebook_with_hyperlinks_and_cover.pdf).
- Blue Helmets: Environment, Natural Resources and UN Peacekeeping Operations <http://www.unep.org/disastersandconflicts/Introduction/Enviro>

H. Swedish Civil Contingencies Agency (“MSB”)

The **Swedish Civil Contingencies Agency (MSB)** (<https://www.msb.se/en/About-MSB/>) is an outgrowth of a merging of the parts of the Swedish Government which dealt with domestic civil defence and with foreign disaster assistance (formerly part of the **Swedish International Development Agency**). Within its international cooperation work, **MSB** has standing technical assistance agreements with the **Joint Unit** and **UNHCR** and has provided expertise to the **Joint Unit** and others following a number of disasters, most recently Typhoon Botha in the Philippines. **MSB** has also been closely involved in the development of guidance on post-disaster debris management (Joint UNEP/OCHA Environment Unit, 2011).

MSB has a headquarters-based environment advisor and posts environmental advisors to large scale field operations in addition to providing other environment-focused technical support and implementation of environment-focused projects (e.g., debris management, sewage management). Note that **SIDA**'s environmental review guidance (Swedish International Development Agency, 2002) includes a section on humanitarian assistance and is expected to be used in disaster response programming. Further, **MSB** has used the **GRRT** as guidance for environmental advisors.

I. Green Cross International

Green Cross International is a Swiss-based NGO with associated organisations in 30 countries (www.gcint.org). **Green Cross** focuses the “...combined challenges of security, poverty and environmental degradation to ensure a sustainable and secure future” (Green Cross International, 2010). From a project perspective, **Green Cross** focuses on water and peace, environmental security and sustainability (including demilitarization, pollution management and environmental emergence preparedness), value change, exposure to radiation and toxic chemicals and energy. A recent (2013) initiative has focused on reducing the impacts of industrial disasters through preparedness and capacity building in collaboration with insurance and reinsurance companies (Green Cross International, 2013).



J. ProAct Network¹³

ProAct Network is a Swiss-based NGO which focuses on the nexus of environment disasters/conflict, climate change, natural resource management and sustainable development. The **ProAct** web site (<http://proactnetwork.org/>) contains an extensive range of documents related to disaster/conflict and the environment. In addition to reports and documents generated through its own work, the web site provides a repository for a wide range of assessment and disaster-related environmental management tools and materials. Areas of past or current work by **ProAct** include:

- Environmental management and the Darfur crisis (see below).
- Stoves in refugee situations.
- Development of environmental guidance and tools for the **Shelter, WASH and Camp Coordination and Camp Management** Clusters (see below).
- Debris management (Ref).
- Trainings on environment-disaster-conflict related topics (e.g., for **MSB**).

K. American Red Cross

The **American Red Cross (ARC)** has been involved with **WWF/US** on greening recovery and reconstruction following the 2004 South Asia Tsunami and the 2010 Haiti earthquake. While there appears to be an institutional commitment to incorporating environmental issues into operations, e.g., the posting of an Environment Advisor to Haiti, an issue with institutional memory has been noted. Because **ARC** staff change frequently, and may not have extensive disaster experience, they can be unaware of earlier work by the **ARC** in incorporating environmental issues into relief and recovery. A similar issue is likely to arise with other NGO and donor humanitarian operations.

L. International Federation of Red Cross and Red Crescent

The **International Federation of Red Cross and Red Crescent (IFRC)** in Geneva has been involved in humanitarian-related environment issues through being a co-convenor of the **Global Shelter Cluster** (see below), and with other parts of the **Red Cross** movement engaging in environment-linked areas, for instance, climate change (<http://www.climatecentre.org/>).

The **IFRC** section dealing with shelter has recently initiated an effort to systematically incorporate sustainability into post disaster relief and recovery assistance (**BRE**). The **Quantifying Sustainability in the Aftermath of Natural Disasters (QSAND)** project is a collaboration with **BRE International** and the **BRE Charitable Trust**. The initial focus of the project is to develop a tool to “inform and measure the sustainability impacts and performances of various stages in the disaster timeline” (**BRE**). The project has reached the stage of field testing the procedures developed,¹⁴ with an on-line version being considered.

M. International Committee of the Red Cross

The **International Committee of the Red Cross (ICRC)** has been integrating environmental sustainability into its operations over the past few years (International Committee of the Red Cross, 2012). These efforts are based on the following framing considerations:

- A sustainable approach results in better services for beneficiaries.

¹³ The author is an affiliate of **ProAct Network**.

¹⁴ The author is one of the persons asked to review the BRE materials.

- Considering ecosystems and ecosystem services can enable affected populations to return to normal conditions more quickly.
- **ICRC** should demonstrate a respect for the environment in keeping with its overall humanitarian focus.
- A sustainable approach leads to lower operating costs.
- The **ICRC** can play a significant role among international humanitarian organisations in terms of sustainable development, and should set an example in this area.

Putting these considerations to practice, the **ICRC** has set seven environment-related objectives for their operations:

1. “Reducing the potential impact of environmental degradation and climate change on victims of conflict and other situations of violence.”
2. “Controlling the environmental footprint of ICRC operational and support activities.”
3. Taking “the social dimension into consideration in its capacity of employer and responsible organisation.”
4. Systematic applications of “... rules and principles of ethical conduct ... to the management of financial resources.”
5. “Reference indicators for sustainable development parameters are defined and are subject to annual reporting.”
6. ICRC “...staff members adhere to the idea of sustainable development and put it into practice in their work.”
7. “Implementing the principles of sustainable development makes a concrete contribution to the ICRC’s general partnership objective.” (International Committee of the Red Cross, 2012:7-9).


The **ICRC** has developed a **Framework for Environmental Management in Assistance Programmes** (International Committee of the Red Cross, 2009) which details conceptual and practical approaches to integrating environmental considerations into humanitarian operations. The document notes the environment-conflict links which may result from humanitarian assistance and provides a set of tables which identify possible environmental impacts and mitigation measures associated with specific types of interventions. Additional information on the ICRC’s approach to sustainable development is available at: <http://www.icrc.org/eng/resources/documents/article/review-2010/irrc-879-environmental-management.htm>.

The **ICRC** has also developed a number of reports and documents related to the military operations and the environment (International Committee of the Red Cross, 1996) and the consequences of war (Weir, 2012). Because of the nature of work done by the **ICRC** it is likely that some pro-environment efforts by the **Committee** are not always well publicized or widely known.

N. Norwegian Refugee Council

The **Norwegian Refugee Council (NRC)** has had periodic engagement in environmental issues related to refugees. For instance, the **NRC** funded a review of environmental conditions in a refugee camp in Burundi (ProAct Network, 2009) and the integration of environmental issues into the **Camp Management Toolkit** (Norwegian Refugee Council, 2008).

More recently, NRC commissioned a **Report on Environmental Assessment and Accountability in the Humanitarian Sector for the NRC** (Phillips, et al, 2012) and an *Environment in Shelter and Settlement Programmes* web site (<http://www.environmentinshelter.org/home/>). The site contains sections on (a) *Assessment*



Tools, (b) Management Phases, (c) *Environmental Impact* and (d) *Links*. The *Management Phases* section¹⁵ is built around a software programme which is intended to aid users in making decisions about assessing and addressing shelter-related environmental impacts and easily accessing information needed to support these decisions. Although this section is functional it is considered a prototype still in development.

O. Sun Mountain International¹⁶

Sun Mountain International is a US-Ecuador NGO which specializes in environmental issues related to development and disasters. **Sun Mountain** led the **Rapid Environmental Impact Assessment: Haiti Earthquake - January 12, 2010** (Sun Mountain, 2010a), the development of the **Haiti Programmatic Environmental Impact Assessment for Temporary Shelter** (Sun Mountain 2010b) and the **Site Selection, Development and Decommissioning for Temporary Relocation And Resettlement Sites** (Sun Mountain 2011), with other work focusing on ensuring sustainable impacts from food aid assistance programs, disaster risk assessment and eco-systems management.

P. Humanitarian Clusters, InterAgency Standing Committee

The **Humanitarian Clusters** were established by the InterAgency Standing Committee (United Nations Development Program, 2006). Four Clusters with the most active engagement in environmental issues are the **Global Shelter**, **WASH**, the **Camp Coordination and Camp Management** and **Logistics Clusters**, as summarized below. Other Clusters do not appear to have significant engagement in environmental issues.

Global Shelter Cluster¹⁷

The **Global Shelter Cluster**, co-convened by the **IFRC** and **UNHCR**, has developed a shelter-specific assessment tool and other resources (see <https://sheltercluster.org/References/Pages/CrossCutting.aspx>), as well as a package of materials for use by a Shelter Cluster Environment Advisor, including training materials.¹⁸ Two Environment Advisor trainings were held, in Sri Lanka and Honduras.

Environmental Advisors have been assigned to Haiti following the 2008 floods, West Sumatra following the 2009 earthquake and Haiti following the 2010 earthquake. In Haiti, the Environment Advisors developed an extensive library of materials related to sustainable or less environmentally damaging, shelter (see <https://sites.google.com/site/shelterhaiti2010/technical-info/enviromental-reference>).

There is also an **Environment Community of Practice** within the **Global Shelter Cluster** membership. The **Community** has recently completed a short assessment of opportunities for integrating energy efficiency into post disaster shelter operations.¹⁹

While the importance of the environment in post disaster shelter is generally recognized across the **Cluster**, the limited deployment of Environment Advisors has been an issue. With respect to natural disasters, this situation seems to arise from a combination of a lack of funding for the Advisor position, a lack of awareness on the part of a Cluster Coordinator that she can call on environment-related support²⁰ or that environmental issues are considered

¹⁵ <http://www.environmentinshelter.org/management-phases/>.


¹⁶ The author has worked for Sun Mountain at various times.

¹⁷ The author has been involved in developing environment-related materials for the **Global Shelter Cluster**.

¹⁸ The full set of materials are available from the author.

¹⁹ Draft available from the author. Also see United Nations Development Program, 2006.

²⁰ Not all natural disaster shelter cluster responses are managed by IFRC.



with only limited relevance to emergency operations and largely involve late recovery tree planting. These issues are under active discussion within the **Global Shelter Cluster**.

For conflict or refugee situations, **UNHCR** leads the **Cluster** and calls upon internal resources to manage environmental issues. In general, because of the client-agent relationship between **UNHCR** and implementing agencies operating with **UNHCR** funds or authorization, external information on environmental management is limited. In some cases, it appears necessary for **UNHCR** to prioritize immediate life support assistance over environmental issues due to limited funding.

WASH Cluster

The **WASH Cluster**, led by **UNICEF**, has developed guidance and technical papers on environmental issues related to the provision of water, sanitation and hygiene (see <http://www.washcluster.info/content/environment>). These materials cover the following topics (web links embedded in each title).

- [Environmental Best Practice in Emergency WASH Operations Position Paper](#)
- [The Environment, Water, Sanitation and Hygiene: Key Concepts and Considerations in Emergency Response](#)
- [Potential Environmental Impacts Checklist for Common WASH Interventions](#)
- [Reducing the Environmental Impacts of Vector Control Chemicals in Emergencies](#)²¹
- [Disaster Waste Management WASH Technical Paper](#)
- [Re-use and Recycling WASH Technical Paper | Annex I: Re-using and Recycling Disaster Wastes](#)
- [Water Treatment Waste Management Technical Paper](#)²²

Unlike the **Shelter Cluster**, the **WASH Cluster** has not developed a specific capacity to address environmental issues (e.g., an Environment Advisor). Reasons for this include that:

- The **WASH Cluster** does not expect to have a negative impact on the environment given standard operating parameters which incorporate pro-environment management,
- The environment is inherent to WASH operations, and
- Creating an advisor position would reduce direct operational responsibilities to manage environmental impacts.²³

Camp Coordination and Camp Management Cluster

The **Camp Coordination and Camp Management Cluster (CCCM)** is co-chaired by the **International Organisation for Migration (IOM)** and **UNHCR**. **CCCM** has been involved in the development of guidance on environmental issues for some time. However, the existence of the **Management Toolkit** (Norwegian Refugee Council, 2008), and **Global Shelter** and **WASH Cluster** environment-focused materials largely cover many of the needs associated with camp and informal settlement management.


Logistics Cluster

The **Logistics Cluster** generally focuses on the delivery of supplies and commodities in as timely a fashion as possible based on the prioritization indicated by the requester. For instance, if a requester indicates they require immediate delivery, a **Cluster** operation may

²¹ The author contributed to this paper.

²² The author contributed to this paper.

²³ Points defined by the author while involved in WASH Cluster discussions on environmental issues.



allocate a helicopter to the task, even though this may be the most energy intensive transport mode.

As a result, decisions to minimise CO₂ generated per unit delivered does not normally rest with the **Logistics Cluster** but with those ordering transportation. Experience suggests that those requesting transport assistance do not always understand they are deciding on the level of CO₂ generation, and thus environmental impact, when they define how immediately something needs to be delivered.

The **Cluster** recognizes the importance of *green logistics* and have included a page on the topic on the **Logistics Cluster** web site (<http://log.logcluster.org/operational-environment/green-logistics/index.html>). The work of the Cluster is also linked to the **Fleet Forum** (discussed below).



SECTION III

Policy and Guidance on integration of Environmental issues into Humanitarian Interventions

A. Do No Harm

The fundamental argument for the integration of environmental issues into humanitarian interventions comes from the *do no harm* principle. While the do no harm concept was originally applied to humanitarian assistance during conflict (Collaborative Learning Project, 2004), the fundamental concept that assistance should not harm the intended beneficiaries holds for non-conflict situations and for assistance which may have an impact on the environment.

The practical application of the do not harm concept to environment-humanitarian assistance nexus means that assistance should not:

- Place beneficiaries in unnecessary danger, e.g., relocating to a flood zone, use of contaminated water, etc.
- Cause degradation of the environment, e.g., over extraction of sand and wood for construction, etc.
- Establish unsustainable livelihoods, e.g., providing boats that contribute to overfishing or irrigation wells which lower the water table, etc.
- Prevent necessary access to natural resources, e.g., promoting tree plantations at the expense of herders and small scale fuel wood gathering, etc.
- Create inequities in access to resources (natural or other) which subject the beneficiaries to harm.

At the same time, harm to the environment may be necessary to save lives. However, where harm is done under the humanitarian imperative, the party causing the harm is also responsible for remediating the harm to the greatest degree possible. This concept applies most often to refugee/displaced camps, where considerable local environmental damage can occur and needs to be remediated to avoid long-term harm to the environment and those who normally used these locations for livelihoods and social obligations.

B. Red Cross Movement and NGOs

The **Code of Conduct for the International Red Cross and Red Crescent Movement and Non-Governmental Organisations (NGOs) in Disaster Relief** (International Federation of Red Cross and Red Crescent Societies) adopted by the **Red Cross** movement as well as a number of NGOs²⁴ refers directly to the impact of humanitarian assistance on the environment:

²⁴ Initially Caritas Internationalis, Catholic Relief Services, International Save the Children Alliance, Lutheran World Federation, Oxfam, and The World Council of Churches, but subscribed to by other NGOs as well.

“8 Relief aid must strive to reduce future vulnerabilities to disaster as well as meeting basic needs

All relief actions affect the prospects for long-term development, either in a positive or a negative fashion. Recognising this, we will strive to implement relief programmes which actively reduce the beneficiaries’ vulnerability to future disasters and help create sustainable lifestyles. *We will pay particular attention to environmental concerns in the design and management of relief programmes*”(emphasis added)(International Federation of Red Cross and Red Crescent Societies, no date:4).

The **Code of Conduct** is one of the elements on which the **Humanitarian Charter and Minimum Standards in Humanitarian Response** is based (Sphere Project, 2011:24) and links environmental concerns to the fundamental concepts of humanitarian assistance.

C. Sphere Standards

The Sphere Project’s **Humanitarian Charter and Minimum Standards in Humanitarian Response** (Sphere Project, 2011) provides both a general principle with respect to environment and sector specific guidance. The general principle provides both a definition of the environment and what the minimum standards set out in the document are to address in terms of minimizing environmental impacts from humanitarian assistance:

“Environment: The environment is understood as the physical, chemical and biological elements and processes that affect disaster-affected and local populations’ lives and livelihoods. It provides the natural resources that sustain individuals and contributes to quality of life. It needs protection and management if essential functions are to be maintained. The minimum standards address the need to prevent over-exploitation, pollution and degradation of environmental conditions and aim to secure the life-supporting functions of the environment, reduce risk and vulnerability and seek to introduce mechanisms that foster adaptability of natural systems for self-recovery. (Sphere Project, 2011:14).

Specific guidance on incorporating environmental issues into humanitarian assistance are set out for:

- WASH, e.g., faecal matter disposal, vector management, solid waste management.
- Food security, e.g., access and use of natural resources, packaging, local sourcing,
- Livelihoods, e.g., access to natural resources).
- Shelter and NFIs, e.g., environmental assessment and impacts of sourcing materials and site development, debris management, stoves and fuel sources.
- Health, e.g., disposal of medical waste.

The value of the environment-linked minimum standards and guidance in avoiding or minimizing negative environmental impacts has not been assessed.

D. Joint UNEP/OCHA Unit and United Nations Environment Programme

The **Joint Unit** and **UNEP** (at times together with others) have issued a number of general or specific guidance documents related to environment and humanitarian interventions. These documents include:

- **Humanitarian Action and the Environment** (United Nations Environment Programme, no date b).

- **Key Things to Know About Environment as a “Cross-Cutting” Issue in Early Recovery** (United Nations Environment Programme, no date c).
- **Mainstreaming the Environment into Humanitarian Action** (United Nations Environment Programme, no date d).
- **From Conflict to Peacebuilding: The Role of Natural Resources and the Environment** (United Nations Environment Programme, no date e).
- **Guidelines for Environmental Emergencies** (Joint UNEP/OCHA Unit, 2009).

E. Donors

Most donors have specific environmental review procedures although these procedures can vary from those applied for domestic use to specific procedures for international assistance. However, how the policy of applying these procedures to humanitarian assistance is not consistent across organisations or in approach.

At a basic policy level it is generally accepted that normal rules and procedures should not stand in the way of life saving assistance. For instance, the **US Agency of International Development (US AID)** has a provision to waive legally required environmental reviews for all emergency assistance, and this provision is specifically stated in legislation for a specific allocation of funds intended for disaster assistance.

The lack of clarity comes from defining when the life-saving exception no longer applies, noting that not doing environmental reviews appears to make the delivery of humanitarian assistance much quicker. For **US AID**, the trigger point comes when assistance is no longer designated as immediately life saving. From this point, normal environmental review procedures again apply, although funds provided with the explicit statement that normal regulations do not apply still can be used without an environmental review.


US AID is used here because it has well established and widely used disaster assistance and environmental review procedures and has implemented a consistent division between when these procedures apply and when they do not apply. For a post-conflict example, see Kelly, 2012. For general environmental review procedures see http://www.usaid.gov/our_work/environment/compliance.

While experience indicates that the Canadian and Australian environmental review procedures have been applied to post disaster or conflict assistance, and **International Financial Institutions** have environmental review or safeguard procedures which should be applied post disaster or post conflict, little formal information could be located on when and to what detail these are applied for post disaster/post conflict assistance.

Enlightening, however, is research done by Abrahams (2012) on post disaster shelter in Haiti. His work indicates that donors tend to expect implementers to incorporate sustainability (and thus some level of impact assessment) into project implementation. On the other hand, implementers expect specific directions from funders on environmental sustainability before implementing such an effort. This said, Abrahams did find that some implementers did unilaterally implement measures toward sustainability, but based on personal views and not policy or programmatic directives from a funder.

F. Department for International Development

DFID commissioned the **Mainstreaming the Environment into Humanitarian Response – An Exploration of Opportunities and Issues** (Barrett, et al, 2007) report in 2007. The report provides an extensive review of the humanitarian response sector’s links to the environment, current as of 2007. As findings, the report identifies linkages between




humanitarian assistance and the environment, benefits of incorporating the environment into humanitarian assistance and challenges to this process, as summarized below:

- Linkages:
 - **“Environmental issues have implications** for the nature and frequency of disasters and the subsequent humanitarian aid (notably availability of natural resources to support the response).
 - **Both the disaster itself and the subsequent humanitarian response can have primary impacts** on the quality and availability of environmental resources and receptors (e.g. water, land, soil, air) with subsequent secondary impacts on human health and livelihoods.”
- Benefits
 - **“Delivering sustainable solutions** – environmental resources (e.g. wood for construction, water for drinking) are essential inputs for response activities, however careful identification, assessment and management is essential to deliver sustainable solutions.
 - **Mitigation of negative impacts** – negative environmental impacts (e.g. localized resource depletion) can undermine the effectiveness of the response. Early assessment of these risks/ impacts can ensure that appropriate mitigation measures and opportunities are identified and implemented.
 - **Reduced costs in the long-term** – a longer-term approach can reduce the likelihood of protracted negative effects and hence the overall costs of disasters, as humanitarian assistance starts to link more effectively into the development process.”
- Challenges
 - **“The need to strengthen** partnerships and ensure **that cross-cutting themes** like the environment are effectively addressed and prioritised. Field personnel and other humanitarian practitioners **often have low environmental awareness.**
 - **Lack of environmental policy statements** and therefore a lack of prioritisation/commitment.
 - **Absence of environmental performance indicators** and appropriate monitoring and evaluation frameworks impedes ability to analyse the benefits of considering the environment impacts of a humanitarian response.
 - **Increased accountability** at an agency level to ensure that humanitarian agencies fulfil their environmental responsibilities and mandate.
 - **Lack of awareness, understanding, standardisation and use of existing tools** for environmental assessments and insufficient evidence of the successful application.” (Barrett, et al:I-II).

The report provides recommendations to address challenges identified. These are summarized as:

- Develop a network of organisations with an interest in the integration of environmental issues into humanitarian assistance.
- Evaluate environmental assessments.
- Hold agencies accountable for meeting environmental commitments.
- Encourage organisations to integrate environmental considerations into policies, monitoring and disaster management plans.
- Provide technical assistance and funding.
- Define training needs and develop environment-focused training.
- Provide support for (assessment) tool development, dissemination and training. (Barrett, et al, 2007:II).



A quick internal review is needed of the degree to which the **Mainstreaming the Environment** report influences **DFID** policy and practice, and the degree to which materials in the report can be used to support the business-case approach.

G. National Governments

Most national government (and in some cases, state governments) have specific procedures for environmental impact assessment (EIA). In many cases, EIA laws or regulations set thresholds for screening. Depending on the scale of a disaster, relief and (more likely) recovery assistance are subject to impact assessments, at least at the aggregate level.

In some cases, such as India, impact assessment procedures specifically include an assessment of natural hazards. However, how natural and technological hazards are treated in impact assessments varies widely, as do the social and economic impacts that can be associated with these events.

The application of environmental impact regulations following a disaster is inconsistent. In some countries, a legally declared disaster may mean that the impact assessment procedures need to be followed based on the logic that saving lives should not be constrained by routine procedures. In other countries, such as Sri Lanka, the authority managing the impact assessment process is empowered to set the conditions and scope for post disaster environmental impact assessments, recognizing that something less than a full impact assessment may be appropriate following a disaster.

Based on professional experience, external humanitarian assistance tend to not follow national environmental laws and regulations even when complying with a funder's own assessment procedures. While the use of any environmental review procedure is better than no review, a failure to comply with national laws and regulations works against promoting rule-of-law principles.



SECTION IV

Key Tools for the Integration of Environmental Issues into Humanitarian Interventions

A. Overview

This section provides brief summaries of key tools used for the integration of environmental issues into humanitarian interventions. This section complements similar information provided under **Section III**, above. In general, there are a wide range of assessment tools²⁵, as well as tools and guidance on addressing specific environmental issues, complemented by an expanded set of training options, integrated into or separate from specific tools.

These resources are complemented by a range of tools and methods (not documented here) focused on environmental sustainability or addressing specific environmental impacts. For instance, the extensive literature and technical materials on biogas generation can be used to implement such an effort for displaced person camps in the humanitarian context.

B. Flash Environmental Assessment Tool

The **Flash Environmental Assessment Tool (FEAT)** was developed by Netherlands Ministry of Housing, Spatial Planning and Environment (2008) for the **Joint UNEP/OCHA Unit** to provide a structured and detailed process to assess the impact of environmental hazards. **FEAT** focuses on hazardous chemicals and related technological hazards and provides a detailed process for valuating the relative risk posed by these hazards following a disaster. A training module is available. The tool is most useful in assessing hazardous chemical or industrial threats, either as stand-alone emergencies (e.g., a plant fire) or as part of another disaster (e.g., a chemical leakage associated with an earthquake). **FEAT** has been used in the Democratic Republic of the Congo, Yemen and elsewhere. Further information is available at <http://www.eecentre.org/ResourceDetails.aspx/id/7>.

C. Rapid Environmental Impact Assessment in Disasters

The **Rapid Environmental Impact Assessment in Disasters (REA)** process was developed by CARE International and the AON Benfield UCL Hazard Research Centre to formalize an environmental impact assessment process applicable for disasters and other crisis (Kelly 2005, Kelly 2001). The current version of the REA is available at http://proactnetwork.org/proactwebsite/media/download/resources/EA-Tools/REA%20Disasters_guidelines_v4.4_2005.pdf, with versions in English, French and Spanish available, and Arabic and Russian summaries. There is a **REA** classroom and on-line training modules available. The **REA** has been used in Haiti, Chile, Afghanistan, Sri Lanka, Pakistan, Indonesia, the Philippines, Sudan and elsewhere.

²⁵ Information on assessment tools not covered in this section is available at <http://proactnetwork.org/proactwebsite/en/resources/tools-for-environmental-assessment/95-tools-for-environmental-assessment/206-tools-for-ea>.

D. Debris Management

The **Joint UNEP/OCHA Unit** together with **MSB** developed single source **Disaster Waste Management Guidelines** (Joint UNEP/OCHA Unit, 2012). Related guidance includes **Planning Centralised Building Waste Management Programmes in Response to Large Disasters** (ProAct Network, no date a) with a training module,²⁶ and **Asbestos in Emergencies: Safer Handling and Breaking the Cycle** (ProAct Network, no date b) with a training module.²⁷ Additional resources are available from the NGO **Disaster Waste Recovery** (http://www.disasterwaste.org/about_us.aspx).

Note that in some cases, such as Sri Lanka and Indonesia after the 2004 South Asia Tsunami, or in Haiti, location-specific guidance on debris management has developed. Most of this guidance has been incorporated into or draws from the sources cited above.

E. Fleet Operations and Environmental Impacts

A toolkit developed by the **United Nations Environmental Programme** and **TNT** is available from the **Fleet Forum** to assist in reducing the environmental impact of fleet operations (<http://fleetforum.org/fleet-safety/environmental-impact-2/environmental-impact/>). The **IFRC** uses a process of monitoring fleet operations to minimize fuel use and thus CO₂ emissions. The extent of similar programmes among other larger fleet operators in the humanitarian sector is not yet defined.

F. Environmental Marker

Using the example from the gender and humanitarian intervention sector, **UNEP** has developed an *environmental marker* for use in Sudan and Afghanistan. The structure of the marker and evaluation process for Afghanistan is provided below (United Nations Environment Program, no date f).

Guidance: Environment Marker Codes Environment Marker	Description
	Each humanitarian project should identify its potential impact on the environment following guidance provided in the “key environmental messages for integration into the CHAP by cluster”, and address it in a manner which is tailored to Afghanistan.
Environment marker A Positive environmental impact of project	Environmental conditions will be actively improved by the project. The project will fully or significantly address and improve the environment in Afghanistan. No negative impacts on the environment are expected from the project.
Environment marker B No or low environmental impact of project	The environment will experience little or no impact from the project. Neither a positive, nor a negative environmental impact is expected from the project.
Environment marker C Medium negative environmental impact is expected from the project Cross Cutting messages for all clusters has been used for assessment and mitigation	The project contains environmentally detrimental components and will require further assessment, mitigation and enhancement measures. These projects should carry out a short assessment to determine their likely impact on the environment, and develop mitigation measures by using the cross cutting messages for all clusters Guidance which has been provided by UNEP.

²⁶ <http://proactnetwork.org/proactwebsite/en/policyresearchtoolsguidance/brief-technical-guides/building-waste>.

²⁷ http://proactnetwork.org/proactwebsite/media/download/BriefTechnicalGuides/Asbestos_in_Emergencies.pdf.



Guidance: Environment Marker Codes Environment Marker	Description
Environment marker D Major negative environmental impact is expected from the project An Environmental and Social Screening Assessment has been completed or a Community Environmental Action Plan (CEAP) has been undertaken based on the completion of a Rapid Environmental Assessment (REA).	The project will have a major negative environmental impact. For these projects either: (1) An Environmental and Social Screening Assessment will be completed, or; (2) A Rapid Environmental Assessment (REA) will be undertaken, followed by the development of a Community Environmental Action Plan (CEAP) with the affected community. Guidance on these tools may be found in the references below.
Mitigation Measure N / A	Description This is for A and B projects. Assessment and mitigation of impact is not needed for these projects.
Applies Sector Guidance	This is for C projects. C projects can mitigate their impact by using the sector guidance.
Environmental and Social Screening Assessment	This is for D projects. D projects can assess and mitigate their major impact using one (or more) of the three options <ul style="list-style-type: none"> • Environmental and Social Screening Assessment • Rapid Environmental Assessment • Community Environmental Action Plan (CEAP)
Environmental and Social Screening Assessment	
Community Environmental Action Plan (CEAP)	
None	CEAPs include follow up action planning. This is possible for C and D projects. These are projects with negative impacts that should mitigate their environmental impacts, but for which no action is taken.

G. FRAME

The **Framework for Assessing, Monitoring and Evaluating the Environment in Refugee-Related Operations (FRAME)** (CARE International, no date) is a six module set of tools and guidance for assessing and addressing the impact of refugees on the environment. The modules cover:²⁸


- [Introduction](#)
- [Environmental Assessments](#)
- [Rapid Environmental Assessments](#)
- [Community Environmental Action Planning, including participatory methods](#)
- [Environmental Indicators](#)
- [Evaluation](#)

FRAME includes a highly participative approach and focuses on enabling refugees to manage their own environment in ways that reduce negative impacts. The **FRAME** materials are applicable to any displaced population, and become more important as the duration of displacement continues. **FRAME** has been extensively used in Darfur and other parts of East Africa.

H. Caribbean Development Bank

In contrast to common environmental impact assessment practice, the **Caribbean Development Bank** developed an assessment process to consider the impact of the natural environment, including natural hazards, on development projects, the [Sourcebook on the Integration of Natural Hazards into the Environmental Impact Assessment \(EIA\) Process](#)

²⁸ Hyperlinks included to allow direct access.



(Caribbean Development Bank, no date). The value of such a tool for post crisis recovery assistance is that it can be used to ensure that projects which are to be designed and implemented on a rapid basis will not be negatively impacts by natural hazards. Most environmental assessments focus on the environmental impact of the project on the environment, not the other way around.

I. Training on Environment, Disasters, Conflict and Humanitarian Interventions

In addition to other training modules noted in this report (e.g., the **UNEP-Group URD** training), two broad training programmes touching on environment, disasters, and disaster risk reduction are in the process of being launched.

One programme, developed by **UNEP** in cooperation with the **Centre for Natural Resources and Development** and funded by the European Union and German Government, is a graduate-level course focusing on disasters, the environment and disaster risk reduction. Further details on the course are available at https://www.devex.com/en/news/blogs/new-course-for-aid-workers-on-disasters-and-environment?mkt_tok=3RkMMJWWfF9wsRonuarNcu%2FhmjTEU5z14%2BwpXqSzIMI%2F0ER3fOvrPUfGjI4HRMBil%2BSLDwEYGJlv6SqFTLjAMati1rqKXRQ%3D and <http://www.unep.org/newscentre/Default.aspx?DocumentID=2718&ArticleID=9539&l=en>.

The second effort is a collaboration between the **Joint UNEP/OCHA Unit** and **MSB** focused on providing initial and specialized training, particularly through an on-line portal (see <http://www.eecentre.org/Online-Learning.aspx>) to humanitarian workers and other who may be involved in managing environmental issues following a disaster or crisis. The Joint Unit/MSB work is in the process in being developed.



SECTION V

Next Steps

The materials covered in this study do not indicate that additional broad policy is needed on considering the environment in humanitarian operations. Similarly, there is already a considerable wealth of tools, operational guidance and trainings on how to integrate environmental issues into humanitarian assistance.

There appear to be four general requirements to effectively incorporate environmental issues into humanitarian assistance:

- A more strategic approach to considering sector-level environmental issues in relief and recovery, to identify key areas where environmental problems are likely and interventions most effective.
- Adequate follow-through by donors in ensuring that environmental considerations are incorporated into proposals, funding and implementation. (An Environmental Advisor can play a key role in this process.)
- Better real time monitoring and evaluation of the environmental consequence of humanitarian assistance (also where an Environmental Advisor can play a key role).
- Greater accountability for environmental consequences of humanitarian assistance at the donor and implementer levels, in keeping with the **Humanitarian Charter and Minimum Standards in Humanitarian Response** (Sphere Project, 2011) and good donor-ship concept.

From a practical perspective, and anticipating engagement of Humanitarian-Environmental Advisors²⁹ in humanitarian operations, three needs (in addition to on-going capacity building) can be identified:

- An accessible central repository of materials in environment and relief and recovery. The **ProAct**, **PCDMB** and **Joint Unit** web sites all contribute to developing this repository. These efforts need to continue and expand and become more focused on the practical actions needed to integrate environment into humanitarian assistance.
- Technical information on environment-related tools, procedures and methods need to be condensed into “bite sized” topical packages, so that knowledge acquired can quickly be accessed by those who need to resolve problems at the field level. These packages need to focus on key details and methods with limited conceptual background. Materials developed for the **WASH Cluster** or compiled into **Engineering in Emergencies** (Davis and Lambert, 1995) are examples of operations-oriented access to key knowledge to support field operations.
- More evidence of good and bad practice needs to be collected. Like with other aspects of humanitarian assistance, evaluations and after-action reports need to consider environmental impacts, to learn and demonstrate how to better provide humanitarian assistance using pro-environmental approaches.

²⁹ Note that in addition to **DFID**, **MSB**, the **Joint Unit**, **UNEP**, **USAID**, **WWF** and the **Shelter Cluster** all have mechanisms in place to provide environmental advisors to support humanitarian operations.



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