

## Why Environment Issues Are Important in Recovery

### **1. Environment in a Post-disaster Context**

[http://www.humanitarianreform.org/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Environment/UNEP\\_PDNA\\_draft.pdf](http://www.humanitarianreform.org/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Environment/UNEP_PDNA_draft.pdf)

The cause-effect relationship between environmental degradation, poverty and disasters is complex and has been the subject of many analyses. All signs, however, show that the number of environment-related disasters is currently on the increase, with flooding expected to be among the highest of future predictions. As the many ramifications of a

changing global climate also become more apparent, it must be expected that certain zones which to date may not have experienced serious impacts of natural disasters may in future become more vulnerable to such events.

Predicting natural disasters is a growing area of research. The scale of human suffering however in post disaster situations is rarely considered ahead of a disaster occurring. In some cases, this places an immediate extra burden on perhaps already damaged or degraded environmental services for the provision of emergency shelter, water or waste provisioning. In almost every disaster situation, however, there are some forms of environmental impact, some of which in turn may have additional secondary negative implications for the already affected communities.

Understanding the dynamics between a disaster, its environmental (as well as social and economic) impacts, the needs of the community and implications for the early recovery process is therefore a vital need. Table 1 shows some of the recurrent environment related consequences associated with recent disasters.

At the same time, however, there are a number of humanitarian- and relief-related activities that are commonly undertaken during the early recovery phase which may themselves have an impact on the state of the environment. Specific attention needs to be given to these – many of which are cross-cutting activities from other related clusters – among which are:

- over-extraction of ground water aquifers;
- water contamination from improper sewage disposal;



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- selection of inappropriate or energy-intensive systems such as desalination plants;
- unsustainable supply of shelter materials;
- unsustainable use of timber for construction and fuelwood;
- deforestation;
- land degradation and soil erosion;
- waste disposal; and
- selection of inappropriate sites for temporary shelter and site planning.

### **Box 1: Environmental impacts of post-tsunami reconstruction**

A UNEP assessment of Aceh two years after the 2004 Asian tsunami clearly shows that the reconstruction process has significant impacts on the environment, even though many of the environmental problems that are visible now predate the tsunami. Some of the environmental concerns identified include:

- The locations chosen for the reconstruction of houses are not always adequate. Houses are sometimes built in highly disaster-prone or environmentally sensitive areas, or in areas where the water table is shallow.
- Inadequate or sometimes absent sanitation facilities for reconstructed houses are a major source of ground and surface water pollution, particularly in areas with very shallow water tables.
- The excessive use of burnt clay bricks for the reconstruction of houses, together with the fact that brick kilns mainly use production techniques with very low energy efficiency, results in a demand for huge quantities of fuel wood, which often comes from illegal logging operations.

UNEP: Disaster Risk: Emerging Perspectives

[http://www.unisdr.org/eng/about\\_isdr/isdr-publications/joint-pub/Environment\\_and\\_disaster\\_risk.pdf](http://www.unisdr.org/eng/about_isdr/isdr-publications/joint-pub/Environment_and_disaster_risk.pdf)

## 2. **Environmental Needs Assessment**

[http://www.humanitarianreform.org/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Environment/UNEP\\_PDNA\\_draft.pdf](http://www.humanitarianreform.org/humanitarianreform/Portals/1/cluster%20approach%20page/clusters%20pages/Environment/UNEP_PDNA_draft.pdf)

Until very recently, post-disaster needs assessments were being carried out primarily to identify immediate and life-saving needs. As part of the ongoing humanitarian reform, renewed attention has been given to the needs of people and their communities following the end of the emergency phase and before full scale development starts to fill the void. This period – simply defined as “(Early) Recovery” – is clearly one where needs and opportunities are changing.

Early recovery efforts by governments and UN and non-UN actors often suffer from a combination of isolated initiatives and sporadic strategic leadership. This leads to an absence of a comprehensive strategy, a duplication of efforts in some areas, a waste of resources and lives in others, and a failure to factor in risk reduction considerations and put in place the conditions for sustainable long-term recovery.

In recognition of this, renewed effort is now being given to supporting this early recovery phase of post-disaster situations, by addressing needs and opportunities across the board, taking all sectors into account, taking institutional and community needs into account and consolidating data into a format where it can be immediately inserted into the available mechanisms for funding support.

Addressing environmental consideration features as part of this process and, in a bid to highlight the many ways in which environmental issues need to be considered during early recovery, this guide has been commissioned. Development of this guide – in support of early recovery and as part of the broader post-disaster needs assessment (PDNA) is intended to help:

- identify environmental impacts and risks caused by the crisis and relief operations as well as potential environmental pressures from recovery;



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- identify the negative response-related activities or coping mechanisms resulting from an emergency that can impact the environment or create new environmental risks;
- assess institutional capacities at the national and local levels to mitigate environmental risks and manage environmental recovery;
- provide a forward looking plan that aims to “Build Back Better”, by integrating environmental needs within early recovery programming and across the relevant relief and recovery clusters; and
- provide a standard reference point for future environmental assessments in the post-crisis setting, in spite of the fact that this tool is expected to be modified to suite the needs of different situations.

In addition to the above, a number of secondary objects might be highlighted, these being the opportunity to:

- generate strategic baseline data that could eventually feed into a monitoring and evaluation system to track implementation of environmental recovery interventions;
- identify initiatives that can be strengthened to provide or help rebuild livelihoods and sustain human security – especially those that depend on the environment and natural resources;
- identify how environmental degradation may have contributed to the underlying causes of the emergency and how environmental vulnerabilities can be addressed during recovery;
- identify opportunities to re-orient livelihoods along sustainable pathways, using environmentally sound construction practices and/or alternative energy options, by identifying ecosystem restoration requirements; and by mainstreaming disaster risk reduction; and
- provide an understanding of the specific vulnerabilities that women and other groups in the communities face, and identify their capacities and needs to engage in the environmental recovery process.



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The actual timing and time require for an ENA to be carried out is difficult to generalize, but this should always be considered as part of the early recovery and other cluster interventions in a post-disaster situation. Table 2 shows an indicative timeframe for conducting an ENA, assuming that a Team Leader has already been identified.

### **3. Strengthen capacities for environmental recovery**

[http://postconflict.unep.ch/publications/env\\_vulnerability.pdf](http://postconflict.unep.ch/publications/env_vulnerability.pdf)

Recovery and reconstruction efforts that are carried out without proper environmental guidance and safeguards can have devastating short- and long-term impacts on the environment. The environmental footprint of post-disaster recovery can be significant. The scramble to make ends meet and rise ‘from the ashes’, in particular, involves intensive exploitation of the remaining natural resources<sup>21</sup>, both on site and in the remaining non-affected locations.

Such activities are not only unsustainable from the point of view of those affected by disasters – resources are limited and do not offer a long-term solution to their dilemma – they are also unsustainable from an environmental perspective.

Governments and organizations are often ill-equipped and ill-prepared to carry out even rapid environmental impact assessments (EIAs) in resettlement areas, and can be overwhelmed with the number of development projects to evaluate. However, adverse consequences are potentially avoidable with a solid response and recovery framework in place before a disaster strikes.

## Strategic Environmental Framework

The Strategic Environmental Framework (SEF) for a more environmentally sound reconstruction of Aceh Province in Indonesia is a set of policies, structures and operational guidelines ensuring that environment is properly considered in Aceh's complete reconstruction programme and project cycle – from policy development to planning, implementation, monitoring, and compliance promotion. The objectives include supporting environmentally and socially sound investments; ensuring that environmental and social aspects, including cumulative impacts, are considered at an early stage in the reconstruction planning process; and preventing inadequate implementation of environmentally sound plans and projects. The SEF is designed to assist decision-making in the project cycle's early stages and to provide a practical tool for mitigating project impacts. The framework proposes a series of interventions that can be used independently or as a whole.