



Key things to Know About Environment as a “Cross Cutting” Issue In Early Recovery

This brief note provides an overview of “*key things to know about environment*” for early recovery actors, including Early Recovery Advisors and Coordinators, agency partners, UN Country Teams and IASC Country Team representatives.

1. Brief Description of Environment as a “Cross-Cutting” Issue

Disasters and conflicts, as well as relief and recovery operations, impact the environment in ways that threaten human life, health, livelihoods and security. Failure to address these risks can undermine the relief process, causing additional loss of life, displacement, aid dependency and increased vulnerability. Disaster managers and humanitarian workers, guided by the early recovery principles, must take action to avoid this.

Early recovery interventions should help to identify the direct and indirect impacts associated with the following four areas of risks:

1. **Life:** Acute threats to human life can be caused by the release of hazardous materials, such as industrial chemicals, asbestos and hydrocarbons, into the environment. Significant contamination of air, soil and water resources may result from such situations and can cause severe sickness or even death. Identifying these kinds of acute environmental risks is a critical priority in order to protect the lives of both local residents and humanitarian actors.
2. **Health:** Threats to human health are also caused by the release of hazardous substances and debris waste into the environment. While short term exposure may not be lethal, over the longer term it can threaten human health. Identifying environmental risks to health becomes a priority in the days immediately following an emergency.
3. **Livelihoods:** Threats to human livelihoods are caused by damage to natural resources and ecosystems such as forests, pastures, soils, wetlands and coral reefs. The sudden loss of environmental goods and services often implies immediate loss of livelihoods and subsequent reliance on humanitarian aid. Often it is the poor and vulnerable members of communities that are the most affected. Identifying environmental impacts to human livelihoods is a priority during the early recovery phase.
4. **Security:** Threats to human security occur when critical natural resources or ecosystem services are damaged. In some cases, this damage increases vulnerability to natural hazards such as the destruction of coastal mangroves and



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enhanced vulnerability to hurricanes. In other cases, damage to scarce resources can exacerbate tensions over access and lead to conflict, such is the case with grazing land and drinking water. Identifying environmental impacts to human security is thus also a priority during the early recovery phase.

2. Opportunities during Early Recovery to Address Environment as a Cross-Cutting Issue

Early Recovery actors are encouraged to adopt an appropriate strategy towards addressing the environment in a crisis situation that ensures that an environmental perspective is integrated into all policies and programmes, and that dedicated resources and supporting interventions are undertaken.

The following are key areas that need to be addressed in a strategic fashion:

1. Hazardous Substances:

- All sources of acute risk (such as chemical spills from damaged infrastructure) should be identified as early as possible.
- Special consideration should be paid to the potential issue of building rubble being contaminated by asbestos. A detailed survey should be undertaken by a suitably qualified expert, prior to handling and transporting building rubble.
- Access to affected sites/areas should be restricted until clean-up or risk reduction measures can be taken.
- Appropriate Personal Protective Equipment (PPE) should be used at all times by those individuals involved in assessment and clean-up activities.
- The Joint UNEP-OCHA Environment Unit provides emergency assistance through rapid assessments and advice.

2. Emergency Waste Management:

- Plan the location of emergency waste disposal sites with local authorities to avoid potential contamination of water sources and the generation of disease vectors and odors.
- The burning of waste should, as far as is possible, be avoided due to the risk of inhalation of toxic fumes by residents and workers, particularly where plastics are being burned.
- Where burning is being considered a thorough risk assessment should be undertaken.



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- Hazardous healthcare waste (HHCW) and other forms of hazardous waste should be disposed of using appropriate methods, such as steam sterilization (autoclaves) for HHCW.
- Where appropriate facilities are not locally available for the disposal of hazardous waste, such as chemicals and hydrocarbons, temporary storage facilities should be constructed and used until such time as appropriate long-term disposal solutions are identified.

3. Water Use:

- To determine sustainable levels of water use, an early assessment of the presence, quality, quantity and recharge rate of groundwater sources should be undertaken.
- This information should be used in determining the appropriate location for the establishment of temporary settlements.
- Monitor groundwater extraction to ensure that the natural recharge rate is not exceeded.
- Raise awareness of the importance of water conservation.

4. Sanitation:

- Take care to locate latrines downstream of water-wells, at least 30m from groundwater sources and at least 1.5m above the water table.
- Fitting pit latrines with concrete slabs eliminates the need for secondary wooden slabs or supporting beams and facilitates easy cleaning.
- Consider the up- and down-stream impacts of water use and sanitation, as well as its cumulative impact on a watershed.

5. Energy Consumption:

- The use of wood or charcoal for domestic energy by displaced people has a major impact on the environment and livelihoods.
- Promote energy saving measures, such as fuel-efficient stoves and cooking techniques, fast cooking foods and consider using cleaner energy sources (e.g. gas and photovoltaic power).

6. Refugee / IDP camps:

- If possible, keep camp populations below 20,000 and locate camp sites at least 15km from ecologically sensitive areas and neighboring camps.



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- Consider controlled harvesting sites or mud brick construction to avoid deforestation due to the use of local timber in construction initiatives.
- Make appropriate plans or waste collection services within the camps, including giving serious attention to the ultimate disposal site and its location.
- Promote the “three Rs” of waste management in camps: Reduce, Re-use and Recycle.
- For more information, see UNHCR’s Environmental Guidelines for Refugee Operations.

7. Transport:

- Well-maintained vehicles and eco-friendly driving techniques reduce air pollution and fuel consumption.
- Where possible, choose cleaner fuels and fuel efficient, low emissions vehicles to minimize carbon emissions.
- Waste oil should be stored in plastic drums and properly disposed of or taken back to its source.

8. Green procurement:

- Smart procurement decisions are a simple way to reduce the environmental impact of humanitarian operations, therefore:
 - Choose goods with the minimum possible packaging, especially containers that can be reused or recycled.
 - Source materials from local or national markets to minimize travel miles and carbon emissions and prefer recycled materials.
 - Select suppliers with certified safe and sustainable production practices, in particular for forest products, water supply, metals and plastics.

3. Checklist of Environmental Questions to Include in ER Assessments, Programme Development and Monitoring

The following is a list of key environmental questions that must be raised and addressed throughout the various early recovery phases:

1. Does the assessment team contain an environmental expert – and are they substantially involved in the early recovery planning and programme development?



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2. Has an inventory of relevant existing data been developed and made available to the Assessment Team ?
3. Have local environmental NGOs been communicated with to assist with the generation of environmental base-line data ?
4. Is there evidence that environmental degradation may have contributed to the underlying causes of the disaster or conflict?
5. What are the main environmental impacts and risks caused by the crisis?
6. What are the environmental damages which may possibly result from relief operations, or that are likely to result from planned relief or recovery activities? (such as impacts from temporary settlements for IDPs' and refugees' relating to sanitation, waste management and use of local timber etc)
7. Have specific stakeholder groups that depended heavily on natural resources been identified and consulted?
8. Has information been gathered on practiced or traditional means of natural resources management?
9. Have institutional capacities been assessed at the national and local levels to mitigate environmental risks and manage environmental recovery?
10. Have the following opportunities to build back better and re-orient livelihoods along sustainable pathways been seized:
 - Use environmentally sound construction practices;
 - Introduce alternative energy options;
 - In addressing ecosystems' restoration, mainstream disaster risk reduction (DRR) initiatives.

The following is a list of questions that are specific to the individual sectors:

- **Shelter:**
 - Have proposed relocation sites been screened for environmental criteria?
 - Where are construction and supporting materials sourced from?
- **Water, Sanitation and Hygiene:**
 - Has the supply of drinking water been affected by the crisis?
 - If so what is the current situation regarding access to water and water quality?
 - Has the location of new camps had any environmental impacts on water availability, extraction, storage and use?
 - Are sites of temporary shelter subject to occasional inundation? Is drainage adequate?
 - Have displaced communities been provided with adequate sanitation facilities?



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- Have latrines been properly sites and constructed?

➤ **Waste Management:**

- Do any of the waste streams pose an immediate threat to people or the environment, such as asbestos and toxic materials?
- Have systems been put in place to ensure that HHCW is being separated and disposed of correctly?
- Have plans been developed and put in place to encourage re-use and recycling practices?
- Have the environmental consequences of additional waste disposal sites been considered?
- Have temporary storage facilities for hazardous waste been provided until such time as appropriate long term disposal options have been identified.

➤ **Energy:**

- If fuel wood is the main source of domestic energy, has an assessment been conducted on the availability and needs for fuel wood?
- Is there a security issue related to accessing energy sources such a fuel wood?
- Have alternative, environmentally sustainable sources of fuel been identified ?

➤ **Biodiversity:**

- Are there known sites of ecological importance in or near the area impacted by the disaster or conflict (or by temporary resettlement of communities)?
- Has a damage assessment been carried out on any of these impacted sites?
- Have management plans for such sites included DRR measures and disaster preparedness?
- Are national authorities responsible for managing natural resources and biodiversity conservation still functional after the crisis?

➤ **Agriculture, Livestock and Fisheries:**

- Is the crisis known for having had an impact on coastal or inland fisheries, agriculture or livestock keeping?
- Was there formerly a strong dependence by communities on agriculture, livestock keeping, or fisheries?



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- Is productive agricultural land potentially impacted by the inappropriate location of temporary settlement camps?

4. Key References

- The main useful references and tools are available on the Humanitarian Reform website on the “Environment” webpage:
<http://www.humanitarianreform.org/Default.aspx?tabid=456#>
- Environmental Post-Disaster Needs Assessment (PDNA), A Practical Guide for Implementation, UNEP, March 2008.
- Flash Environmental Assessment Tool (FEAT), UNEP/OCHA Joint Unit, September 2008.
- Emergency Waste Management Guidelines, OCHA-UNEP, 2006
- IASC Leaflet Humanitarian Action and the Environment, OCHA-UNEP, 2007
- Environmental Guidelines for Refugee Operations, UNHCR, 2005
- From Conflict to Peacebuilding: The role of Natural Resources and the Environment, UNEP, 2009