

Environmental concerns

Natural disasters and conflicts have a significant negative impact on the environment. This also threatens response and recovery.

Environmental threats during response

- **To life** – through hazardous chemicals, infrastructure e.g. dams, nuclear plants
- **To health** - through toxic waste and damage to water sources

Environmental threats to early recovery

- **To livelihoods** – damage to forests, soil, pastures, wetlands, reefs, water sources
- **To security** – fragility of ecosystem and threat to human security, increased conflict over limited resources

Impact of disaster response and recovery on the environment

Conversely disaster response and recovery activities also pose a serious threat to the environment and early analysis of the potential impacts is needed to identify mitigation strategies. Factors affecting the severity of impact include:

Geographic	<ul style="list-style-type: none"> ▪ Numbers affected or displaced and population density ▪ Extent of disaster area and availability of resources
Social	<ul style="list-style-type: none"> ▪ Support from host communities and level of self-sufficiency ▪ Cultural norms and respect for environment ▪ Social / power structures and livelihood options
Environmental	<ul style="list-style-type: none"> ▪ Environmental resilience to withstand impact and recover ▪ Ability to absorb waste

Environmental impact risks by sector

Protection	Sexual and gender based violence can occur during fuel collection
Health	Poor management of chemicals, water, healthcare waste, corpses.
WASH	Damage to aquifers; water contamination from sewage / salination; poor rehabilitation of wells; over extraction of water;
Shelter, Non Food Items	Unsustainable construction materials e.g. timber, burnt bricks, sand; inappropriate site selection or design; deforestation and soil erosion
Camp coordination management	Land degradation; loss of biodiversity; improper waste and chemical disposal; unsustainable use of fuel and materials; poor management/decommissioning of camps and pit latrines.
Logistics	Inadequate disposal of construction, packaging, oil, fuel, tyres; procurement of goods produced in an unsustainable way.
Early recovery	No environmental impact assessment and mitigating plan; improper land use, building /infrastructure designs and urban planning; unsustainable use of natural resources for reconstruction/ livelihoods; unequal access to resources.

Mitigating the risks of environmental impact

- Identify the presence and means for safe disposal of hazardous materials
- Take appropriate measures for safe disposal of sanitation and emergency waste
- Assess capacity and protection needs for water sources in the short and long-term
- Determine energy consumption demands and available resources
- Assess long-term impact of size, siting and potential expansion of camps
- Seek green procurement and ways to minimise transport pollution
- Work within all applicable standards and guidelines e.g. Sphere; Hyogo Framework
- Engage expert guidance in assessments, material selection and project design

Additional resources on the All In Diary website
 Environment and Humanitarian Action © Joint UNEP/OCHA Environment Unit 2014
 Environment Marker © OCHA & UNEP 2014
 FRAME Toolkit: Module IV Community Environmental Action Planning, © UNHCR, CARE 2009

Web links for further information

Resources: <http://www.usaidgems.org/>
 UNEP: <http://www.unep.org/disastersandconflicts/>
 Training: <https://www.urd.org/Environmenttraining-toolkit>
<http://green-recovery.org/>
 Environmental Emergencies Centre: <http://www.eecentre.org/>

Hazards which threaten the environment

Floods

- transports contaminated material
- cause erosion
- pollute water
- damage infrastructure

Storms and Winds

- damage crops and infrastructure

Fires

- cause air pollution
- destroy housing and infrastructure
- lead to erosion

Droughts

- lead to wind erosion
- cause loss of crops and water sources

Landslides

- damage infrastructure
- contaminate water

Earthquakes

- damage infrastructure
- risk damage from hazardous materials
- cause landslides etc

Conflicts

- damage infrastructure and basic services
- chemical, biological, nuclear contamination
- destroy livelihoods; increase basic needs

Others

- hazardous materials
- hail or snow
- disease
- volcanoes