SPHERE THEMATIC 1 SHEET

Reducing environmental impact in humanitarian response

Thematic sheets provide more detailed guidance and reflections on themes relevant to the Sphere Handbook. They are based on inputs received throughout the 2017-18 Handbook revision and further guidance and can be updated over time as needed, to reflect learning in the sector.

The environment in humanitarian action: towards sustainability, resilience and accountability

"Programmes should minimise their environmental impact and consider how procurement, transport and choice of materials, or land and natural resource use may protect or degrade the environment further." (Sphere Handbook: *What is Sphere?)*

People need to live in a healthy environment, or their well-being is put in danger. This is the case in everyday life and is even more important in humanitarian crises. **Environmental degradation** inhibits people's capabilities and resilience in many ways, from incomes and livelihoods to impacts on health, education and other dimensions of well-being.

The systematic integration of environmental considerations throughout response operations makes **recovery activities** more effective, contributes positively to **sustainable development**, and lays a foundation for **conflict resolution** and **peacebuilding**. Environmental considerations also help mitigate the impact of climate change and support climate change adaptation. **The relationship between the environment and humanitarian response is twofold:**

1. **The environment impacts a humanitarian response**
   a. **A degraded environment can trigger or worsen a humanitarian crisis.**

   - *Climate change is driving mass migration globally and is strongly linked to civil disasters, such as in Sudan, Chad, the Philippines, and Madagascar. Women and children (already much more likely to die in a crisis) are most at risk. Global forecasts estimate between 25 million to 1 billion environmental migrants by 2050*
   - *Technological or chemical incidents*

   b. **A healthy environment will allow for effective humanitarian response.**

   - *An environment free of human excreta is essential for people's dignity, safety, health and well-being. In crisis situations, safe excreta management it is as important as safe water supply (WASH chapter, section 3, Excreta management)*

2. **Humanitarian response affects the environment**
   a. **It can damage the environment further**

   - *Deforestation as a result of humanitarian operations in Darfur*

   b. **It can improve environmental conditions and reduce future damage and the risk of future crises**

   - *Providing fruit trees can contribute to livelihoods and nutrition and help stabilise the soil, retain water in the ground, provide shade etc.*
   - *Providing cooking fuel and other (clean) energy sources at the early stages of a response can limit deforestation*

Continued on page 2

SYMBOLS: see also example GN: Guidance Note KA: Key Action

Addressing environmental issues from the **early phases of a crisis** can bring numerous positive results, including:

- Addressing underlying environmental issues that may have contributed to the crisis, and reducing the risk of recurrence;
- Protecting livelihoods by safeguarding the natural resources on which they depend *(FSN chapter, Livelihoods section);*
- Improving communities' health and safety by reducing pollution (air, water and soil) and waste *(Shelter standard 7);*
- Reducing the potential for conflict over scarce resources at local level;
- Protecting people and the environment from future hazards through mitigation activities, building back better *(Shelter chapter);*
- Slowing or reversing trends that lead to deforestation, desertification and pollution and thereby supporting community resilience, biodiversity, food security and economic development.

In protracted settings, humanitarian action needs to take a longer-term perspective to prepare communities for not only current but also future environmental and climate-related risks. This is particularly important where increased pressure is put on natural resources or where environmental conditions might contribute to prolonged crises, such as droughts.

Humanitarian action can include using nature-based solutions[1] as part of an overall adaptation strategy (also CHS Commitment 9 and GN)

Humanitarian response should seek to adapt operations to help protect communities against the adverse effects of climate change.

More on climate risk management and disaster risk reduction

1. Nature-based solutions are defined by the International Union for Conservation of Nature as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits".
2. As per Sphere glossary: http://bit.ly/Sphere-Glossary-2019
3. Adapted from Our Common Future: Report of the World Commission on Environment and Development (A/42/427), Chapter 2: Towards Sustainable Development.
4. UNISDR

Environmental sustainability and climate change adaptation in Sphere

The Sphere Handbook provides an integrated, balanced approach to ensuring that humanitarian actors strive to **preserve and restore the environment as an integral part of overall humanitarian response and recovery activities.**

The above-mentioned elements are **mainstreamed** across all chapters of the Handbook, both in the foundation and technical chapters.

An introduction to the importance of environmental sustainability is included in *What is Sphere, p. 19.*

Shelter and settlement standard 7 on Environmental sustainability is the most prominent environmental reference in Sphere and to a large extent can be applied to other sectors. Its key activities are:

- Integrate environmental impact assessment and management into all planning;
- Implement environmentally sustainable programmes;
- Select sustainable materials and techniques;
- Manage key environmental impact issues such as solid waste, energy and land use practice;
- Establish, restore and promote safe, reliable, affordable and environmentally sustainable energy supply systems; and
- Protect, restore and improve the ecological value of operational sites during and after use and decommission/transition to development in an environmentally sensitive way.

Environmental considerations are key to a **localised approach** to aid in which the needs of people are systematically assessed and considered *(CHS Commitment 3; Shelter standard 7).*

Accountability

Managing the environment well increases the accountability of humanitarian action. The main bearers of negative environmental consequences are the most vulnerable, making environmental mainstreaming in disaster management a matter of accountability to affected communities and other key stakeholders. The earlier environmental issues are incorporated into response and recovery, the more likely they can be robustly mainstreamed across humanitarian programming.

Protection: do no harm

As a minimum, humanitarian response should not contribute to unsustainable management of natural resources or the occurrence of environmental emergencies.

The environment is one key component of potential or actual unintended negative effects of humanitarian activities that may compromise people's safety, dignity and rights. (CHS Commitment 3, KA 3.6). Commitment 3 includes a detailed GN on *environmental concerns* (p 62).

A thorough analysis of the links between environmental factors and protection is needed in humanitarian programming as a step towards to avoiding or mitigating environmental stresses and protection risks.

In certain displacement situations, greater needs for water and wood (for building shelters) may lead to deforestation and lack of water. Women and children may have to travel further to collect firewood or water and be more exposed to various risks (see PP1, GN on Humanitarian Assistance).

Guiding questions for including protection and environment in programme implementation can include:

- How are protection and environment integrated into your sector's activities?
- What do you see as key protection risks linked to environmental factors – including things that may not be obvious – that should be highlighted?
- Are there any protection guidelines related to environment that inform your sector's activities that you feel should be emphasised?

More on protection and environment

DEFINITIONS[2]:

Environment

The physical, chemical, and biological surroundings in which people live and work and which, in turn, they influence. It provides life-supporting natural resources and determines the quality of the surroundings in which people live. The environment needs to be protected and managed if these essential functions are to be maintained. A healthy environment contributes to disaster response.

Image: UNEP/ OCHA Joint Unit

Environmental degradation

Refers to unsustainable natural resource exploitation and pollution that can further threaten disaster-affected populations and ecosystems. Some examples include land degradation, deforestation, desertification, wild-land fires and loss of biodiversity.

Image: UNEP/ OCHA Joint Unit

Environmental sustainability

Meeting present needs while not compromising the ability of future generations to meet their own needs.[3]

Image: IRIN/ Kate Holt

Climate change adaptation

Climate change pushes at-risk people beyond their capacity to cope and makes more people vulnerable to the effects of disasters. Climate change adaptation relates to interventions that seek to identify, reduce and manage risks associated with more frequent, severe and unpredictable weather events.

Image: UNEP/ OCHA Joint Unit

Disaster risk reduction

Is a concept and practice aimed at preventing new disaster risk, reducing existing disaster risk and managing residual risk, all of which contribute to strengthening resilience and sustainable development.[4]

Image: UNEP/ OCHA Joint Unit

Resilience

Capacity to adapt to change. Understanding people's dependence on the environment for their own recovery can inform programme design and lead to more sustainable responses to cope with future shocks and reduce future risk.

Image: IRIN/ Guy Oliver

Core Humanitarian Standard

Commitments 1, 3, 6 and 9 are particularly important for environmental considerations. However, all commitments should be considered for relevance in a particular response context.

Commitment 1: Appropriateness and relevance. Effective humanitarian response must **assess environmental risk** alongside wider assessments and situational analyses to avoid exacerbating local vulnerabilities. Numerous tools help consider the environment in humanitarian programming (see below).

More on taking the environment into account in situational analysis and assessments

Commitment 3: Local capacities and do-no-harm: see above "do no harm".

Commitment 6: Coordination. It is mutually beneficial for humanitarians and environmental professionals to work together in humanitarian response. Better coordination and finding common solutions lead to improved lives and livelihoods for disaster-affected communities. This is particularly true in countries and regions with fragile ecology and poverty that are at higher risk for natural disasters and instability, creating a vicious circle of social and environmental degradation.

Consulting and involving **local environmental authorities and organisations** can highlight key issues including environmental sensitivities, natural resources availability, environmental hazards and land tenure rights *(Shelter standard 6)*.

More on coordination for environmental mainstreaming in disaster management

Commitment 9: Responsible management and use of resources. Key action 9.4 and supporting GN call for considering the environmental impact of using local or natural resources. It recommends rapid environmental impact assessments to determine risk and put mitigating measures in place as early as possible.

WASH

WASH responses should enhance long-term community goals and minimise environmental impact.

(Essential concepts in WASH, p 94)

WASH programming and the environment are inherently linked and interdependent: to a large extent, **WASH is the environment**. Sustainable WASH outcomes cannot be realised where there are poor environmental conditions or practices which may lead, for example, to depleted or contaminated water resources. Furthermore, there are environmental and protection links in the areas of, for example, water collection or fuel needed for water treatment.

Water supply standard 2.1 GN, addresses environmental impacts when identifying the most appropriate groundwater or surface water sources; reusing greywater and harvesting rainwater. It also addresses minimising spill and use of spill water for irrigation in gardening/planting systems.

Excreta management standards, incl GN, address minimising environmental impacts of excreta management, for example from contamination of surface or groundwater sources. This includes the correct disposal or treatment of water with minimal environmental damage.

Vector control standard 4.1 addresses vector control to reduce chemical contamination risks and minimising insecticide use. It includes a GN on *environmental engineering response*.

Solid waste management standards address reusing, repurposing, recycling, or composting solid waste and household waste.

Appendix 1: WASH assessment checklist includes questions on environmental impact in WASH assessments.

More on WASH and environment

Food security and nutrition

Food-secure communities, especially those who rely on the environment for their livelihoods, need healthy and productive ecosystems.

The Food Security and Nutrition chapter links environment with food security, livelihoods, and nutrition:

Food security assessment standard 1.1 suggests to include environmental degradation in initial food security assessments, stating that environmental degradation and food insecurity are linked *(KA1 and GN on environmental degradation).*

Food security *is influenced by macro-economic, socio-political and environmental factors. National and international policies, processes or institutions can impact affected people's access to nutritionally adequate food. The degradation of the local environment and the increasingly variable and extreme weather caused by climate change also affect food security. [...] Over time, responses [...] should not have a negative impact on natural resources and the environment. (Introduction to the Food security section.*

Food security standard 5 calls to protect, preserve and restore the natural environment from further degradation when delivering food assistance. This includes considering the impact of cooking fuel on the enviromnet and livelihoods strategies that don't contribute to deforestation or soil erosion *(KA 4 and GN on Environmental impact).*

Food assistance may be used to prevent people adopting negative coping mechanisms such as over-exploitation or destruction of natural resources *(Introduction to the Food assistance section).*

Food assistance standard 6.2 (incl. GN) covers the responsible use of food assistance packaging, including by minimusing waste, reusing and recycling.

Livelihood standards 7.1 and 7.2 call for an environmentally sensitive approach to setting production strategies *(Livelihoods standard 7.1, GN on production strategies)* and options for income generation, including in support of the environment and for producing sustainable construction materials *(Livelihoods standard 7.2, Key action 6 and related GN).*

Additional examples:

- *Provide seeds that are appropriate to future climate conditions, such as drought-resistant varieties where drier conditions are expected*
- *Support adaptive livelihoods activities, for example duck farming instead of chicken farming in flood-prone areas*

Mainstream climate change adaptation in food security and livelihoods activities by considering the impacts of climate change on water availability, agricultural production systems and practices, yields, pest occurrence, market structures, irrigation systems, planting schedules, and irrigation practices and by engaging in climate-smart livelihoods interventions.
→ *livelihoods interventions (Introduction to the Food security section; GN on environmental impact in Food security standard 5; Livelihoods standard 7.1)*

- *More on Food security, nutrition and livelihoods and environment*

Shelter

Shelter and settlements programmes carry one of the highest risks of negative environmental impacts in disaster management.

At the same time, they offer an opportunity to minimise potential environmental impacts through robust environmental assessments and management.

Environmental sustainability is **mainstreamed** across the Shelter and settlement chapter introduction and all standards, and has a specific standard *(Shelter standard 7).*

Building back sustainably will help affected people be more **resilient** to stresses and shocks in the present and reduce future risk.

Key issues covered in **Shelter standard 7 on Environmental sustainability** are listed on p. 2 above.

- *Reference note from the Shelter Cluster Environment Community of Practice on Shelter and settlements standard 7*
- *More on shelter and settlements and environment*
- *Shelter Cluster Environment Community of Practice*

Health

The state of the environment, such as air and water quality, directly impacts people's health, and health sector activities may impact the environment. **Health is the ultimate measure of a good environment.**

Climate change can negatively impact public health and exacerbate disaster risk. For example, certain pests increase due to warming, such as algal blooms and malaria-carrying mosquitoes that can then spread to areas previously not affected by malaria.

The Health systems (HS) section covers environmental aspects of respiratory illness in children (HS standard 1.1, GN) and safe disposal of medical and healthcare waste (HS standards 1.1 and 1.3, GN).

Communicable diseases standard 2.1.1 (incl GN) covers environmental sanitation and vector control, as well as the management of solid waste as part of intersectoral prevention measures linked to WASH standards 4.2 (vector control) and 5.1 (solid waste management).

Child health standard 2.2.2 (inc. GN) covers household air pollution and related respiratory illnesses, proposing alternative cooking stoves to reduce smoke and fumes.

- *More on health and environment*

Delivering through markets

In its text and checklists, the appendix *Delivering assistance through markets* discusses the importance of ethical and environmental sustainability in market-based assistance:

- Understand the risk of markets overexploiting natural resources and ecosystems, with further risks to people;
- When assessing and monitoring the potential risks of cash-based assistance, include protection risks and negative impacts on natural resources and the environment;
- Consider if use of natural resources is sustainable and if it could lead to further conflict over resources;
- Train and supervise staff at all levels of the supply chain to observe ethical and environmentally sustainable practices *(CHS Commitment 8: staff);*
- Dispose of damaged commodities and prevent the re-entry of unfit commodities to the supply chain that may harm the environment or contaminate water sources.

- *Materials and supply chain, Logistics, Green Logistics Guide*
- *Natural resource management*
- *Cash*

Environment, the programme management cycle and Sphere: checklist of key considerations

Assessments

- Include environmental assessments as an integral component of the disaster assessment phase
- Conduct an environmental assessment as soon as possible after the disaster (CHS Commitment 1 and Shelter Standard 7). Investigate environmental drivers of the crisis and the main environmental impacts and risks to affected populations
- Invite environmental actors to participate in environmental assessments (Shelter standard 7)
- Request additional environmental expertise if necessary – consider the host government and national organisations for expertise (CHS Commitments 3 and 6)
- Pay attention to communities' perceptions of environmental issues and concerns (CHS Commitment 4)

Programme design

- Incorporate the results of environmental assessments into programme design
- Translate the results into mitigation activities and define solutions to identified environmental issues
- Use local capacities to deal with environmental issues
- Make sure the humanitarian needs, vulnerabilities, and risks which the response plan seeks to address reflect how environmental issues exacerbate or contribute to the crisis
- Include environmental considerations in objectives, outcomes, and activities to ensure they are addressed throughout the response
  - If it is impossible to integrate environmental considerations into the objectives, adapt the outputs and activities in a way that addresses environmental concerns
- Budget for environmental activities

Implementation

- Screen planned humanitarian activities for their environmental impacts and risks *(see Resources)*
- If activities with negative environmental impacts are underway, consider:
  - Postponing or cancelling the activity if it will result in unacceptable environmental damage, but always prioritising the life-saving imperative
  - Adapting ongoing activities or plans to incorporate environmental impact mitigation or avoidance measures
  - Accepting negative environmental impacts due to relief assistance as unavoidable and preferable to not providing assistance. Include impact mitigation and remediation actions in other elements of the relief or post-disaster recovery programmes
  - Building partnerships with environmental actors and environmental experts
  - In protracted crises, making use of local capacities, increasing the accountability of the response and rooting it in the local context
- In protracted crises, couple project implementation activities with awareness raising

Monitoring, evaluation, and learning

- Based on programmatic assessments, develop an environmental mitigation and management plan *(see Shelter standard 7)*.
- Monitor the environmental impact of humanitarian activities against baseline information from environmental assessments
- Incorporate the perspectives of local communities on perceived environmental changes (e.g. changes to livelihood practices due to environmental issues)
- Request technical expertise and engage local environmental actors to help determine if measurements are appropriate. This can help where monitoring environmental impacts is difficult
- Monitor three key environmental impacts:
  - Direct environmental consequences of the natural or technological hazard that caused the emergency
  - Environmental consequences of relief operations
  - The environmental impact of unmet basic needs of affected people

  - Define clear indicators that relate to the type of emergency response and environmental context. See *Project Design, Monitoring and Evaluation Module of the Green Recovery and Reconstruction Toolkit*

- Include the extent to which environmental issues have been addressed and how negative environmental impacts have been mitigated (or not) in the final, annual or mid-term evaluation
- Include environmental considerations in lessons learned workshops to inform future operations
- Use the evaluation as a learning tool to produce concrete recommendations to inform environmental mainstreaming in future programming

More on environment across the Humanitarian Programme Cycle

Outlook

Environmental issues will cause and exacerbate more crises. Humanitarian operations will be under increasing pressure to minimise environmental impacts to avoid worsening crises. This topic will therefore be of increasing importance to Sphere.

These considerations also relate to humanitarian organisations' air travel and their substantive carbon footprint. The sustainability of at times extensive air travel will be increasingly put into question. Sphere could be a platform for organisations developing their environmental strategies and capturing global best practices for the next Handbook edition.

Author: Amanda George.
With support of the Swedish Red Cross

Swedish Red Cross

Tools and resources

Help desks:

- For environment in humanitarian action coordination support, integration of environment into the Humanitarian Programme Cycle and ongoing humanitarian responses, contact the UN Environment/OCHA Joint Unit: ochaunep@un.org
- For environmental specialist support in disaster recovery, reconstruction, and risk reduction work, contact the Green Recovery Connect help desk run by WWF and partners: http://envirodm.org/helpdesk

Guidance on environment in humanitarian action

- EHA Connect: An online toolkit bringing the humanitarian and environmental communities together to support environmentally sustainable disaster management..
- Green Recovery and Reconstruction: Training Toolkit for Humanitarian Action (GRRT): WWF and American Red Cross.
- Framework for Assessing, Monitoring and Evaluating the Environment in Refugee-Related Operations, Toolkit. UNHCR and CARE, 2009.
- Environmental Emergencies Centre, UN Environment/OCHA Joint Unit. An online preparedness tool with information, tools, training, and guidance.
- The Rapid Environmental Impact Assessment (REA) tool uses a simple methodology to identify, define, and prioritise potential environmental impacts in disaster situations, including those caused by humanitarian organisations.
- The Flash Environmental Assessment Tool (FEAT) supports initial disaster responders to determine risks posed by hazardous substances.
- The Nexus Environmental Assessment Tool (NEAT+) is an environmental screening tool covering the overall environmental sensitivity of the project area, shelter, WASH, and food security.
- Groupe URD publishes reports and training materials around environmental issues

Sphere Thematic Sheets Series 2019

Geneva, Switzerland
handbook@spherestandards.org

www.spherestandards.org

Sphere