Energy and environment - camps

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Key points

- Ensure potential environmental risks and energy challenges are addressed during preparedness planning.
- Ensure that funding proposals and refugee response plans address energy poverty and environmental issues.
- Monitor energy use, energy poverty, natural resource management, and environmental impacts. This information is vital for the improvement of programming.
- Do not locate camps close to environmentally sensitive areas.
- Make sure that adequate political commitment and human resources are devoted to energy issues and environmental protection.
- Seek the support of standby partners that have environmental specialists. Many agencies have rosters of environmental and energy specialists, who are often under-used.
- Seek technical advice and support on energy and the environment through the Energy and Environment Community of Practice (www.ecop.unhcr.org).

1. Overview

Meeting the energy needs of refugees, and protecting the environment they depend on, are critical cross-cutting issues for UNHCR. Emergency responses often harm natural resources, largely due to lack of foresight during preparedness planning. Environmental degradation seriously increases risks of flooding and landslides that affected communities face after disasters. Key recurring issues are firewood collection, deforestation (due to the construction of temporary shelters and cooking), erosion and landslides, pollution of rivers and streams, overgrazing, pollution of air and soils, and unsafe waste management.
Once the environment has been damaged, its rehabilitation and the repair of long-term negative consequences are difficult and expensive, so precautionary measures to avoid damage are critical. Environment and energy should both be considered cross-cutting sectoral concerns and should be addressed from the onset of an emergency, and preferably beforehand by preparedness planning. The emergency phase is a critical moment, when energy poverty can be addressed, enhancing safety and self-reliance, and environmental degradation avoided or managed.

2. Main guidance

**Protection objectives**

- To provide safe, timely and reliable access to energy during refugee emergency operations.
- To protect refugees from risks, such as sexual and gender-based violence (SGBV), that often occur at night in unlighted areas (latrines, washing zones, playgrounds, workshops) or while refugees search for firewood.
- To protect refugees from physical risks such as landslides, floods, and exposure to hazardous wastes and toxins in the air, soil or water.
- To reduce tension between refugee and local populations over scarce natural resources.
- To encourage refugee self-reliance by reducing energy poverty and promoting sustainable natural resource use.

**Underlying principles and standards**

- Prevention measures are the best way to tackle irreversible environmental impacts. Prevention is also more cost effective than mitigation of environmental damage.
- At the onset, involve refugees and host communities in the design and implementation of energy and environment programmes.
- Seek technical advice from local, regional, and national institutions, private organizations, and academic institutions.
- Ensure that a stockpile of high-quality energy products is accessible to avoid prolonged energy poverty and poor service delivery.
- Protect the environment, which is a source of livelihoods for both host and refugee communities.
- Commitment 9 of the Core Humanitarian Standard on quality and accountability recognizes that the environmental impacts of all sectoral activities should be assessed and mitigated. Communities and people affected by crisis are entitled to expect the organizations that assist them to manage resources effectively, efficiently and ethically.
- Sphere Standard 7 on shelter and settlement (environmental sustainability) states that shelter and settlement assistance should minimize any negative impacts of programmes on the natural environment.
Protection Risks

- Where locations are unlit at night, refugees face specific forms of insecurity, notably assault and SGBV.
- In some instances, women, men, boys and girls travel long distances to fetch firewood, thereby putting themselves at risk of SGBV.
- If they lack fuel or access to energy, refugees may adopt unsafe or harmful coping strategies. (For example, they may sell part of their food ration to purchase cooking fuel, increasing the risk of malnutrition; or burn plastics or other waste as fuel or a fire starter, exposing them to toxic chemicals.)
- Erosion following the removal of vegetation often creates large gullies that may cause deadly and damaging landslides.
- Run-off into streams and rivers may be toxic, putting at risk refugees and host communities who use it for drinking, cooking or agriculture. Toxins that accumulate in the food chain can cause chronic health risks.
- Unsafe waste disposal exposes refugees and host communities to toxic chemicals in soils and the air as well as to disease vectors.

Other risks

- Refugees may acquire pneumonia, cardiovascular diseases, or lung cancer, or put their health at risk in other ways, by cooking in inappropriate conditions or with bad fuels or equipment.
- Poor waste management practices also generate health risks: if safe locations for waste disposal are not planned, refugees may adopt dangerous solutions, such as burning waste.
- Failure to consider environmental issues at an early stage has been shown to jeopardize the asylum space.
- Searching for firewood takes time that could be used for educational or livelihood activities.
- In the absence of light and electricity, students cannot study at night and livelihood activities can only be undertaken during the day.
- Pollution of soils and natural waterways jeopardizes the livelihoods and development opportunities of refugees and host communities.
- Unsustainable use of natural resources (wood, land, water) causes biodiversity loss and desertification.
- Degradation and depletion of natural resources causes conflicts within refugee population and between refugees and host communities.
- Greenhouse gas emissions contribute to global warming and climate change.

Key decision points

At the start of an emergency response, commission a rapid environmental assessment as early as possible so that the response can take informed decisions. Undertake an energy feasibility study to identify energy needs, the best energy strategy, and technologies that are locally available. Emergency response kits should include emergency stoves, fuel for at least 4-6 months, and a solar light.
When planning shelter and settlement, including distribution of non-food items (NFI), conduct a market survey to determine what materials and capacities are locally available. The survey should assess the degree to which supplies can be obtained for the duration of the project and make sure that the proposed operation will not interfere with the local economy. Where it may be decided to procure goods internationally (plastic sheeting, tents, NFI and other core relief items [CRI]), compare the supply chain and its environmental implications with solutions that are available locally; choose the best option.

Assess the area and its carrying capacity to determine what plot size is required and how many people it can support. Base your calculation on the needs assessment but also on environmental considerations.

If shelters or other facilities have been built using environmentally unfriendly materials (plastic sheeting, other polymer-based materials), draft a clear plan for their safe and environmentally sound disposal, or repurpose the materials at the end of their lifespan or at decommission.

Environmental protection measures should be put in place. Mark trees in and outside the camp that should not be cut or cut down. Establish a 5 metre buffer zone around all surface waters (streams, rivers, lakes...) within which vegetation should be left intact. By means of education and monitoring, prevent all dumping and discharge into surface waters. If surface waters are used as a water supply, monitor them to prevent overuse and downstream impacts. Limit vegetation clearance to avoid erosion wherever possible; prioritize hand clearance over mechanical clearance to reduce soil disturbance and limit erosion. Map potential locations for surface flooding and ensure drainage is adequate. Do not use fire or burning to clear sites or dispose of cleared vegetation. Establish refuse collection points that separate organic and inorganic waste. Where possible, compost organics and make the compost available for livelihood activities. Never burn plastic. Prepare and run an environmental awareness campaign, using a variety of appropriate forms of communication.

**Key steps**

1. Set-up an energy and environmental task force; involve relevant stakeholders.
2. Undertake a rapid environmental assessment.
3. Develop a response plan in association with Government counterparts, selected partners and technical services.
4. By means of a needs assessment, consult both the refugee and host communities on habits and traditions that might increase the burden on the environment. Consider cooking, shelter, commonly used construction materials, use of space, and livelihoods (especially pastoral and livestock activities).
5. Identify affordable products and services that beneficiaries can access easily, with the aim of improving local provision, market development, and job opportunities.
6. Take steps to ensure that, as far as possible, all domestic and institutional energy needs are immediately met in a sustainable manner. Review the situation after 4 to 6 months. Wherever feasible, the aim should be to meet energy needs from renewable sources.
7. Take steps immediately to prevent pollution of soils or surface waters by adopting appropriate waste management and erosion controls.
8. When planning shelter and settlement, take action to mitigate the risks of soil erosion, surface water runoff and landslides. These objectives can be achieved by designing an appropriate settlement layout (roads, paths, plots); establishing an appropriate drainage system; integrating green buffer zones in the settlement design, which will also help to recharge local aquifers; and defining and planning the site's carrying capacity. Define the optimal size of the site in terms of plots and the number of persons of concern it supports; the site should not compromise the environmental quality of the area in the short or long term.
9. Work with WASH and health colleagues on medical waste management.
10. Draw up and implement awareness-raising campaigns on energy use and environmental management. These should benefit host as well as refugee communities.
11. Test and establish a preliminary monitoring system.
12. Provide trainings for partners and community mobilizers that build their capacity to manage energy and the environment.

Key management considerations

Senior management should ensure that all sectors address energy and environmental concerns from the outset of an emergency. A dedicated budget for environment and energy should be allocated. The budget should be used to enhance protection and self-reliance, prevent degradation, implement identified mitigation measures, and train staff and partners.

An energy or environmental specialist should be included in emergency teams. S/he should coordinate a rapid environmental assessment. Camp designs and planning should take account of its findings. Where no specialist has been assigned to a team, the team should appoint one of its members to be the energy/environment focal point.

Resources and partnerships

- Government ministries (energy, environment, natural resources).
- Development actors, persons of concern, and host communities.
- National, regional and global private sector organisations with relevant expertise (energy, the environment).
- National, regional and global academic institutions with relevant expertise.
- Local NGOs with relevant expertise.
- Standby partners.

Annexes

UNHCR, Environmental Guidelines, 2005

UNHCR, Frame Toolkit, Framework for Assessing, Monitoring and Evaluating the environment in refugee-related operations, 2005

UNHCR, Refugee Operations and Environmental Management, Selected Lessons Learned, 1998
3. Links

UNHCR, Note on climate change  EHA Connect  The Sphere Project, Reducing environmental impact in humanitarian response  WFP portal

4. Main contacts

Contact the Energy and Environment Unit, Division of Resilience and Solutions (DRS, www.ecop.unhcr.org) at: hqenviro@unhcr.org