



GLOBAL
SHELTER CLUSTER

Coordinating Humanitarian Shelter and Settlements



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RESPONSE PLANNING TIP SHEET FOR ENVIRONMENT, CLIMATE CHANGE AND DRR MAINSTREAMING

This Tip Sheet is developed by the Global Shelter Cluster for use by country-level Shelter Cluster Coordinators to guide them on the minimum requirements for environmental, climate change and Disaster Risk Reduction (DRR) mainstreaming in preparation of the Shelter Chapter of HRPs or HNRPs. This guidance can also be used for the development of shelter cluster/sector strategies or for response planning that does not follow the Humanitarian Programme Cycle (HPC).

Environment, climate change and DRR mainstreaming is required to ensure we meet the needs of affected populations and address and mitigate the environmental impact of shelter and settlement responses in line with humanitarian standards and the “do no harm” principle. It is also essential to ensure that we reduce the potential harm to communities due to existing and exacerbated hazards. Environmental and DRR mainstreaming in shelter programmes and projects depends on the systematic consideration of environmental risks, opportunities, and benefits in programme design, implementation, and throughout the project management cycle. Integrating environmental goals and indicators into planning is necessary to reinforce the rhetorical commitment.

MINIMUM REQUIRED ACTIONS

- 1 | **MAINSTREAM ENVIRONMENT, CLIMATE CHANGE AND DRR CONSIDERATIONS INTO THE NARRATIVE OF THE HNRP OR HRP** - every shelter HRP chapter must commit to this (for example stating that people have access to safe shelter while minimising negative impact on the natural environment)
- 2 | **IDENTIFY CLEAR LINKS BETWEEN** the a) environmental and climate context and needs, and b) disaster risks and DRR needs, identified in **HNO** or **SHELTER NEEDS OVERVIEW** and the strategic objectives, response strategies and response activities outlined in the **HNRP** or **HRP**.¹
- 3 | **EMBED HIGH-LEVEL GOALS FOR ENVIRONMENTAL AND DRR MAINSTREAMING BY ENSURING ENVIRONMENTALLY SOUND RISK-INFORMED PLANNING OF YOUR SECTOR'S STRATEGIC OBJECTIVES, ACTIVITIES AND INDICATORS.** Note that most environmental issues and disaster risks are cross-cutting (e.g. waste, energy, natural resource management, land access, HLP, health impacts, livelihood impacts)
 - a. "Improved living conditions for persons affected by protracted crises, returnees, and vulnerable host communities by providing sustainable shelter and NFI solutions and promoting a greener shelter response" (Yemen SO2)
 - b. "Improve the living conditions of internally displaced persons and returnees through the distribution/ construction of emergency, transitional/semi-durable/durable shelters or through the rental system in a nexus vision with the consideration of environmental aspects" (Chad, SO2)
- 4 | **INCLUDE AT LEAST ONE RELEVANT, CLEAR AND MEASURABLE RESPONSE MONITORING INDICATOR** to measure the progress on the greening of shelter response. See Annex A for the full recommendation, including criteria for measurement.

HRP/HNRP ENVIRONMENT INDICATORS (MINIMUM REQUIREMENT)	
1.	# of people reached with NFI (% reached with kits that meet environmental criteria)
2.	# of people reached with shelter kit distributions (% reached with kits that meet environmental criteria)
3.	# of people reached with shelter repairs and/or rehabilitation a. % with measures to improve environmental impact b. % with measures to reduce hazard exposure
4.	# of people reached through settlement infrastructure activities a. % with measures to improve environmental impact b. % with measures to reduce hazard exposure

¹ See Annex B for an example from Yemen.

ACTIONS

- 5 | INVOLVE AN ENVIRONMENT AND/OR DRR EXPERT IN THE PRODUCTION OF THE HNRP OR HRP shelter chapter (e.g. an environmental adviser from the GSC support team if not available locally)
- 6 | REVIEW PARTNER PROJECT SUBMISSIONS FOR ENVIRONMENTAL, CLIMATE AND DRR CRITERIA by:
- a. Establishing an environmental criterion and a DRR criterion for the selection and approval of project submissions within the **project evaluation score-card**,² e.g. greener NFIs and materials that minimise environmental impact, disaster preparedness training for communities.
 - b. Using the *Environment Marker* - a tool that identifies the potential positive and negative impacts of humanitarian projects on the environment so that these considerations can be integrated into the project, work plans and funding proposals³
 - c. Including **budget** for environmental mitigation, climate adaptation and DRR activities in project submissions.⁴
 - d. Involving an **environment and DRR expert** in the review process

RECOMMENDED ACTIONS

- 1 | DEVELOP AN ENVIRONMENTAL, CLIMATE CHANGE AND DISASTER RISK MITIGATION MAP for each of your result framework activities to advise partners during their HNRP/HRP project development process.
- 2 | INCLUDE TWO TO THREE CONCRETE ENVIRONMENTAL OR CLIMATE CHANGE IMPACT MITIGATION AND DRR ACTIVITIES in Shelter Sector objectives and response strategies that will address the outlined environmental issues and disaster risks in Shelter needs analysis.
- 3 | ADOPT OR DEVELOP GREENER SHELTER AND NFI SPECIFICATIONS (e.g. reducing plastic and packaging of NFIs; using local sustainable materials) in the HRP narrative, for example stating: *"Efforts will be made to procure NFIs with greener specifications, for example that do not contain single use plastic or unnecessary packaging."*
- 4 | ADOPT OR DEVELOP SHELTER AND NFI SPECIFICATIONS WITH VIEW OF HAZARD PROOFING AND REDUCING DISASTER RISKS (e.g. extra strengthening for shelters in high wind prone areas) in the HRP narrative – e.g. *"The shelters in the sites prone to high winds, cyclone strapping or additional ties will be included, in shelters designs and as a minimum procurement requirement for prefabricated shelters."*
- 5 | USE OPTIONS FOR REDUCING, REUSING AND RECYCLING shelter and NFI materials and items, including packaging.

² GSC can provide examples of environmental criteria that can be added to score cards.

³ The Marker can be found [here](#), and Sector guidance including Shelter [here](#). It was [adapted for use in Sudan](#) and this can be done for other countries.

⁴ Environmental mitigation activities can, for example, be implemented through cash/food for work debris management and site preparation as well as part of livelihoods support activities.



HOW TO REDUCE DISASTER RISK AND GREEN YOUR RESPONSE ACTIVITIES

The following are examples of response strategies and activities that can be included in the shelter response where relevant and where linked needs have been identified. They should be tailored to every response.

1. PLAN AND PROVIDE SHELTERS IN AREAS NOT DIRECTLY EXPOSED TO THE KNOWN HAZARDS IN THE AREAS TARGETED BY RESPONSE ACTIVITIES

- *"With a view to better risk prevention, the sector will ensure that the locations identified for the construction of shelters are not subject to flooding, in order to limit the risks of future shocks, guarantee acceptable and dignified living conditions for the populations, preserve the environment, and gradually move towards the strategy of villagization advocated by the Government of Burundi." (Burundi)*

2. IDENTIFY AND PROVIDE CONSTRUCTION MATERIALS THAT MINIMISE ENVIRONMENTAL IMPACT AND STRAIN ON LOCAL RESOURCES

- *"Partners will also aim to understand, prevent, and mitigate adverse environmental impacts by selecting sustainable construction materials to prevent over-exploitation, pollution, and degradation of the natural environment" (Sudan)*
- *"Distribution of shelter materials to reduce the impact on cutting trees and deforestation" (Chad)*

3. IDENTIFY AND PROVIDE CONSTRUCTION MATERIALS THAT CAN WITHSTAND THE IDENTIFIED HAZARDS IN THE AREAS TO A SAFE LEVEL. For example, use moisture-resistant construction material for shelters in flood-prone areas to withstand minor floods.

4. PROVIDE TRAINING ON GREENER CONSTRUCTION MATERIALS AND METHODS

- *"Technical training in construction of quality durable shelters and the safeguarding the environment (the protection of the ecosystem) in a community approach and highlighting the cash transfer modality will be organised for the affected communities, host communities and cluster partners" (Chad)*

5. PROVIDING TRAINING AND BUILDING CAPACITY AT LOCAL LEVEL FOR RISK-INFORMED SITE PLANNING AND DISASTER-RESILIENT CONSTRUCTION

- *"Overall, durable solutions will be promoted through a transfer of capacity to local authorities and stakeholders in the following domain promoted: camp management and camp coordination; disaster risk reduction..." (Cameroon)*

6. **PRIORITISE LOCAL RESOURCES** where their use does not have negative environmental impacts.⁵
 - *"The use of local materials as an alternative to tarpaulins will be explored for the sake of preserving the environment."* (Chad)
7. **PROVIDE CLEAN ENERGY FROM RENEWABLE SOURCES** (for cooking, lighting etc)
 - *"Solutions to provide clean energy from renewable sources such as solar energy, biomass and biogas, among others, will be included. Ovens and stoves will be delivered that improve cooking conditions and allow sustainable management of agricultural and forestry waste, promoting carbon sequestration and helping to reduce greenhouse gases."* (Venezuela)
 - *"In order to reduce the excessive use of firewood, the distribution of improved or gas stoves will be encouraged."* (Chad)
8. **ADDRESS MAJOR ISSUES OF ENVIRONMENTAL CONCERN AND POTENTIAL EXACERBATION OF RISKS IDENTIFIED** in environmental assessments through green response activities. For example, providing alternatives to timber or (re) planting vegetation in areas with acute deforestation, land clearing and landslide risks taking into account local cultural norms and land use regulations:
 - *"Seedlings of trees and fruit trees will be distributed to 72 households in host sites and communities for planting them to restore the environment damaged by rampant cutting down of trees."* (Chad)
9. **PROVIDE NATURAL HAZARD MANAGEMENT SUPPORT, INCLUDING TRAINING IN RISK MITIGATION AND CAPACITY BUILDING OF LOCAL AUTHORITIES:**
 - *"Partners will also provide natural hazard mitigation support for 329,000 people at the community level, including displaced people, to facilitate early warning, prevention, and response measures."* (Yemen)
10. **PLAN HOW WASTE FROM SHELTER-RELATED ACTIVITIES SHOULD BE MANAGED**, ideally by reusing it. Where this is not feasible, a strategy should be in place to ensure that materials are appropriately disposed of, and ideally recycled. This includes:
 - Packaging from emergency shelter kits and NFIs
 - Emergency shelter materials: e.g. tarps can be reused to provide additional weather protection
 - Waste from shelter construction materials: can pose physical and chemical hazards and be a host for disease vectors
 - Potential construction waste should be pre-identified, and an appropriate disposal/management plan developed.
11. **PLAN HOW RUBBLE OR DEBRIS CAN BE MANAGED** following debris management guidelines.⁶ Where possible, disaster waste should be assessed and incorporated into shelter design. This reduces unnecessary material extraction, saves money and reduces the burden of disaster waste.
12. **HIGHLIGHT PROTECTION-ENVIRONMENT LINKS**
 - *"Taking into account the protection aspects of environment and urbanisation will significantly improve the living environment in rural areas and Cluster intervention sites."* (Burkina Faso)
13. **HIGHLIGHT ENVIRONMENT-HLP LINKS**
 - *"Special attention will be given to housing, land, and property (HLP) issues as competition for land and natural resources remain critical drivers of conflict and impediments to durable solutions."* (Sudan)
14. **COLLABORATE WITH ENVIRONMENTAL ORGANISATIONS, RESEARCH INSTITUTIONS** or other actors with access to environmental data and information to identify mitigation activities affecting shelter response.

⁵ Local is usually greener because of the lower carbon footprint of transporting the materials to where they will be used. However, local procurement should not lead to unsustainable resource extraction or harm market access or increase prices for the general consumer. This should be assessed as part of determining green specifications and market supply capacities and impacts.

⁶ <https://www.humanitarianlibrary.org/resource/debris-management-guidelines-1>



GSC ENVIRONMENTAL SUPPORT TEAM

EnvironmentOperations@sheltercluster.org

GSC ENVIRONMENT COMMUNITY OF PRACTICE (ECOP)

For environment and DRR support resources see: <https://sheltercluster.org/community-practice/environment-community-practice>. Contact the ECOP via the co-chairs: Anita.VanBreda@WWFUS.ORG and havedisastercallkelly@gmail.com

VIRTUAL ENVIRONMENTAL AND HUMANITARIAN ADVISER (VEHA) TOOL

An online resource for practitioners and professionals working in the response, planning and management teams.
<https://ehaconnect.org/veha-tool/>

ENVIRONMENT MARKER:

A tool that identifies the potential positive and negative impacts of humanitarian projects on the environment so that these considerations can be integrated in work plans and funding proposals. The Marker can be found [here](#), and Sector guidance including Shelter [here](#). It was [adapted for use in Sudan](#) and this can be done for other countries.

SHELTER CLUSTER CHECKLIST

For a full checklist of environmental issues to consider in shelter programming, consult the [checklist on Identifying Critical Environmental Considerations in Shelter Site Selection, Construction, Management and Decommissioning](#) of the Global Shelter Cluster. These can be integrated into assessments.

QUANTIFYING SUSTAINABILITY IN THE AFTERMATH OF NATURAL DISASTERS ([OSAND](#))

Settlements Chapter: A self-assessment tool to promote sustainable approaches to relief, recovery and reconstruction after disasters.

THE SPHERE HANDBOOK

Humanitarian Charter and Minimum Standards in Humanitarian Response has a specific standard on Environmental Sustainability in Shelter and Settlements Programming (Standard 7) <https://www.spherestandards.org/handbook-2018/>

NEAT+

To screen an operational area for environmental risks, the [Nexus Environmental Assessment Tool \(NEAT+\)](#) can be [used](#). The NEAT+ provides a quick snapshot of the environmental sensitivities/risks of the geographic area of intervention, and the environmental impacts of planned activities. Also helps shelter practitioners to quickly identify the environmental impacts of activities and provide ideas for risk mitigation

EHA CONNECT

A toolkit bringing the humanitarian and environmental communities together to support environmentally sustainable disaster management. <https://ehaconnect.org/clusters/shelter-and-settlements/>

DRR IN HUMANITARIAN SHELTER AND SETTLEMENTS

Global Shelter Cluster and UNDRR guidance on entry points to include DRR, considering also ecosystem-based DRR, into conflict and non-conflict humanitarian operations, with a focus on shelter and settlement assistance. <https://sheltercluster.org/environment-community-practice/documents/drr-humanitarian-shelter-and-settlements>

SCALING UP DISASTER RISK REDUCTION IN HUMANITARIAN ACTION - CHECKLIST

A concrete set of recommendations and accompanying Checklist outlining specific actions for integrating DRR into humanitarian response, including identifying disaster risks and incorporating disaster risk reduction through the phases of the humanitarian programme cycle: <https://www.undrr.org/publication/scaling-disaster-risk-reduction-humanitarian-action>

HOW TO APPLY THE CHECKLIST ON SCALING UP DISASTER RISK REDUCTION IN HUMANITARIAN ACTION

A guide outlining key steps for applying the checklist effectively. Following these steps enables actors to bolster risk reduction efforts, enhance response capabilities, and foster resilience in humanitarian contexts: <https://www.undrr.org/publication/how-apply-checklist-scaling-disaster-risk-reduction-humanitarian-action>

UNDRR WORDS INTO ACTION GUIDELINES - IMPLEMENTATION GUIDE FOR LOCAL DISASTER RISK REDUCTION AND RESILIENCE STRATEGIES

Advice to local governments (authorities, planners and managers at city or other sub-national levels) on developing and implementing integrated local DRR strategy and building resilience at the local scale: <https://www.undrr.org/publication/words-action-guidelines-implementation-guide-local-disaster-risk-reduction-and>



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ANNEX A: ENVIRONMENT & DRR INDICATORS

The indicators listed below are the minimum requirement to monitor the response from an environmental and DRR perspective and should be included in the HRP/HNRP. They are aligned to commonly used indicators across response plans and will allow tracking of what proportion of the response is adopting steps to improve environmental impact and reduce risk.⁷

HRP OUTCOME INDICATOR	% OF SNFI INTERVENTIONS THAT INCORPORATE CRITERIA WHICH SEEK TO IMPROVE ENVIRONMENTAL IMPACT AND REDUCE HAZARD EXPOSURE
HRP OUTPUT INDICATORS (pick those relevant to the context)	CRITERIA TO MEASURE WHETHER THE INDICATOR HAS BEEN MET (to be adapted as relevant to the context)
# of shelter repairs and/or rehabilitation that are conducted using: - measures to improve environmental impact - measures to reduce hazard exposure	Measures to improve environmental impact include: SMAC (which assesses the environmental criteria/carbon footprint of different building material options) - Scorecard assessment (for broader environmental aspects of activity) is conducted⁹ - Energy sources have a low carbon footprint (e.g. replacing green electricity instead of fuel as the main energy source) - Repair/reconstruction materials are locally procured from environmentally-friendly sources - Repair/reconstruction materials minimise packaging and are packaged with reusable, biodegradable, or recyclable material Hazard Exposure measures include: - Identification of locations prone to known hazards in the area (e.g. floods, landslides) - Measures taken to locate the shelters or settlements away from the identified hazard-prone locations - Consideration of known hazards in the area when planning access paths, evacuation routes and other public facilities for the shelter and settlement projects
# of settlement infrastructure repairs and/or rehabilitation that are conducted using: - measures to improve environmental impact - measures to reduce hazard exposure	Measures to improve environmental impact include: SMAC (which assesses the environmental criteria/carbon footprint of different building material options) - Scorecard assessment (for broader environmental aspects of activity) is conducted - Energy sources have a lower carbon footprint (e.g. replacing green electricity instead of fuel as the main energy source) - Repair material is locally sourced - Repair material is packaged with reusable, biodegradable, or recyclable material Hazard Exposure measures include: - Identification of locations prone to known hazards in the area (e.g. floods, landslides) - Measures taken to locate the shelters or settlements away from the identified hazard-prone locations - Consideration of known hazards in the area when planning access paths, evacuation routes and other public facilities for the shelter and settlement projects

⁷ A broader list of environmental indicators is being produced by the GSC for shelter sector strategic planning.

⁸ For example as has been piloted in Niger. The GSC is working on shelter and NFI-specific score cards for general field use in 2022 - 2023

# of NFI kits distributed that meet environmental criteria	Kit items meet cluster “green” specifications, for example:¹⁰ • Kit is locally sourced¹¹ • Kit minimises packaging • Kit is packaged with reusable, biodegradable, or recyclable material • Items can be reused or recycled
# of shelter kits distributed that meet environmental criteria	Kit items meet cluster “green” specifications, for example: • Kit is locally sourced • Kit minimises packaging • Kit is packaged with reusable, biodegradable, or recyclable material • Items can be reused or recycled

⁹ As defined by the country cluster as part of recommendations and requirements on kit composition. GSC environmental advisers can support this process in 2023.

¹⁰ As long as local = greener. This should be assessed as part of determining green specifications and market supply capacities and impacts.

ANNEX B: EXAMPLE OF LINKING HNO OR TO HRP¹¹



MAINSTREAMING ENVIRONMENT, CLIMATE CHANGE AND DRR IN SHELTER RESPONSE IN YEMEN (2023)

The Yemen shelter response has a strong focus on DRR and hazard mitigation through a greener shelter response. It is an example of good practice where the needs identified in HNO based on the environmental context translated into strong environmental mainstreaming in the HRP.

The HNO highlights the environmental context (competition over natural resources; the most vulnerable living in flood prone areas; climate change raising the risk of more severe flooding) and then the environmental needs / critical problems (including impact of natural hazards, in particular flooding, and the need for DRR; deteriorating dams and infrastructure increasing vulnerability to natural hazards and necessitating DRR responses).

The HRP then integrates environment/climate/DRR across all elements of the response plan: first in two of the Cluster Objectives (Shelter SO2: Improved living conditions for persons affected by protracted crises, returnees, and vulnerable host communities by providing sustainable shelter and NFI solutions and promoting a greener shelter response. Shelter SO3: aims to ensure the affected people are protected from climate-related and other environmental hazards, including winterization, natural hazard mitigation, and advance relative security of tenure.); secondly into the response strategy (which reference DRR and resilience mainstreaming across the response and giving key consideration to greening the shelter response in the supply chain and encouraging localised, and environmentally friendly solutions); thirdly in response activities (e.g. providing winterisation and hazard mitigation support) and finally including two indicators to measure the response activities.

¹¹ This example of also relevant for linking a Shelter Needs Overview to the HNRP.