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# INITIAL ENVIRONMENTAL ACTION PLAN

Shelter/NFI/CCCM Cluster Myanmar

(VERSION 1)

December 2023

## 1. Introduction

Myanmar confronts a complex environmental landscape, accentuated by a heightened vulnerability to natural disasters and the escalating impacts of climate change work.

In the latest update to the Global Climate Risk Index (2021), Myanmar was identified as the second-most affected country in the past two decades. The impact of heatwaves, floods, cyclones, and earthquakes positions Myanmar as one of the world's most disaster-prone nations, compounding the challenges faced by already vulnerable populations displaced due to the ongoing conflict.

Recent events, such as Cyclone Mocha in May 2023, further exacerbated challenges, impacting over 3 million people. The 2023 monsoon season saw widespread flooding, affecting hundreds of thousands. With approximately 28 million people residing in high flood exposure risk zones, Myanmar grapples with the evolving patterns of natural hazards influenced by climate change.

In this environmental context, the Shelter/NFI/CCCM Cluster is committed to minimizing the environmental impact of humanitarian interventions, and to assist technically its Cluster partners' response needs. That being the case, the Cluster has developed the Initial Environmental Action Plan.

This initial action plan is intended as a collaborative technical tool, which purpose is to facilitate a joint analysis of interventions, empowering partners to proactively assess, monitor, and collectively mitigate the environmental impact of their responses and humanitarian interventions. Through this shared effort, the Cluster and its members aspire to cultivate a culture of continuous improvement in their collective work.

As a live document, it will be periodically updated and further developed to ensure its relevance and adequate depth in the different topics highlighted.



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## 2. Environmental Actions for Shelter/NFI/CCCM interventions in Myanmar

In line with our dedication to environmental responsibility, we encourage our partners to align their Shelter, NFIs and CCCM interventions with 7 guiding principles, which are translated into tangible initiatives by 11 environmental actions, providing a structured framework to quantitatively measure the proportion of environmentally friendly activities. By embracing these actions, we not only seek to track our progress but also actively guide our commitment toward effectively mitigating the environmental impact of our Cluster's interventions in Myanmar.

### 7 GUIDING PRINCIPLES:

#### 1. Environmental context



Understanding the conditions and elements of the natural environment that influence and are influenced by potential hazards, such as climate, terrain, biodiversity, and the availability of natural resources.

#### 2. Material Sourcing



Origin of materials used for shelter, NFIs and CCCM interventions.

#### 3. Carbon Emissions



Greenhouse gas emissions generated throughout the lifecycle of shelter, NFIs and CCCM activities.

#### 4. Waste Management



Strategies to responsibly handle, reduce, reuse, recycle and dispose of materials generated during shelter, NFIs and CCCM interventions.

#### 5. Design



Efficient design strategies to optimize and promote local construction techniques, increase technical performance, enhance thermal comfort, and improve lighting, thereby reducing overall resources consumption, including materials and energy.

#### 6. Energy



Initiatives that reduce or replace the use of wood for cooking and explore renewable energy sources for lighting and heating.

#### 7. Local Resources



Activities to counterbalance the reduction in carbon dioxide absorption due to shelter, NFIs and CCCM interventions.





## 11 ENVIRONMENTAL ACTIONS:

### ACTION 1 ENVIRONMENTAL CONTEXT

- Carry out environmental screening for the area/site.

Examples: *"Assessment carried out using NEAT+ tool"*  
*"Analysis of natural resources available in the area and potential hazards"*



### ACTION 2 MATERIAL SOURCING

- Use materials sourced from responsibly managed forests, recycled content, or rapidly renewable resources.

Examples: *"Use of certified sustainable sourced timber/wood/bamboo"*  
*"Use of debris for construction or reconstruction of shelters"*



### ACTION 3 CARBON EMISSIONS

- Prioritize materials with low carbon footprint, considering emissions from production, transportation, and overall life cycle.

Examples: *"Procurement of materials in the local market"*  
*"Procurement of materials produced locally"*  
*"Provision of cash for purchase of materials in the local market"*  
*"Use of scorecard for materials to choose those with lower carbon footprint"*  
*"Preference for durable and quality items in opposed to cheap and low lifespan"*



### ACTION 4 CARBON EMISSIONS

- Optimize logistics and staff travels to reduce carbon emissions related with transportation.

Examples: *"Use of full capacity of trucks for transportation of items and materials"*  
*"Coordinate with other programs/clusters for joint distributions and optimization of transportation of items"*  
*"Reduction of staff air travels as much as possible"*



### ACTION 5 WASTE MANAGEMENT

- Setting up of solid waste management at distribution/construction locations.

Examples: *"Demarcation of space for waste collection in the distribution location"*  
*"Coordination with WASH partners to collect waste from distribution"*  
*"Sorting waste in distribution sites, offices and in communal buildings and connecting with local recyclable waste collection systems"*



### ACTION 6 WASTE MANAGEMENT

- Develop a plan to increase lifespan of materials or ensure its recycling or reusing.

Examples: *"Add a layer of palm leaves or thatch on top of tarps to increase lifespan"*  
*"Selection of NFI kits packaging that can be reused by beneficiaries"*



## ACTION 7

## WASTE MANAGEMENT

- Packaging for shelter or NFIs has been minimized and packaging which has not found an immediate use is recovered and reused, repurposed or recycled.



Examples: *"Avoid the use of single use plastic bags for procured items"*  
*"Collection of plastic bags for fabrication of mats"*

## ACTION 8

## DESIGN

- Design strategies to enhance natural ventilation, improve thermal comfort and lighting.



Examples: *"Windows and openings incorporated in the design for air circulation"*  
*"Roof design adapted for sky window".*

## ACTION 9

## DESIGN

- Improve structural systems to minimize material use while maintaining technical performance.



Examples: *"Maximized spans considering the thickness of materials or elements"*  
*"Improve and strengthen joints to increase technical performance".*

## ACTION 10

## ENERGY

- Developing a plan to reduce the use of wood for cooking and promote renewable energies for lighting and heating.



Examples: *"Implementation of bamboo charcoal training"*  
*"Distribution of Fuel-Efficient Stoves"*  
*"Solar panels installed for general lighting in IDPs sites".*

## ACTION 11

## LOCAL RESOURCES

- Environmental offsetting activities such as the planting of trees or gardens to restore any decrease in carbon dioxide absorption caused using raw materials in construction.



Examples: *"Distribution of seedlings for planting trees"*  
*"Training for bamboo suppliers on Sustainable Forestry Management"*



Mats and carpets made with collected plastic bags in Nicaragua.

### 3. Reporting to the Cluster

The 11 environmental actions are related with one or more Shelter, NFIs and CCCM indicators, and our aim as Cluster is just to be able to capture overall % of efforts to mitigate environmental impact in Myanmar response.

Therefore, the upcoming 5W 2024 will include a guidance section with simple questions to measure environmental impact mitigation efforts.

In the 5W, partners will be able to report the number of actions that have been applied to each indicator/activity. This will help the Cluster to identify key areas that need further support, and those that are already being improved.

*\*More information about the reporting process and calculation of % of indicators will be shared during the next months before the end of Quarter 1 in 2024.*

<b>Q1</b>	Have you implemented any environmental assessment or screening (i.e. NEAT+ tool) for the area/site?
<b>Q2</b>	Are the materials being distributed sourced from responsibly managed forests, recycled content, or rapidly renewable resources?
<b>Q3</b>	Are materials available locally?
<b>Q4</b>	Have you implemented any measure/strategy to optimize the transportation of materials during the distributions?
<b>Q5</b>	Have you established or there were already established solid waste management stations at distribution locations?
<b>Q6</b>	Have you developed a plan to increase the lifespan of materials, recycle or reuse them?
<b>Q7</b>	Have you established measures to minimize packaging for shelter/NFIs items and promoted the reuse, repurpose, or recycle of packaging that has not found an immediate use?
<b>Q8</b>	Have you used design strategies to enhance natural ventilation and lighting in shelters?
<b>Q9</b>	Have you established structural framing systems that optimize the use of materials?
<b>Q10</b>	Have you developed a plan to change to alternative fuel sources other than wood for cooking?
<b>Q11</b>	Have you implemented any activities to restore any decrease in carbon dioxide absorption caused using raw materials in construction?

# Initial Environmental Action Plan

Indicators 2024	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11
% of people assisted with shelter materials that meet environmental criteria								N/A	N/A	N/A	
% of people assisted with shelter construction using environmentally friendly techniques <sup>1</sup>										N/A	
% of people assisted with shelter reconstruction using environmentally friendly techniques										N/A	
% of people assisted with shelter repair/rehabilitation using environmentally friendly techniques										N/A	
% of people assisted with site infrastructure improvement using environmentally friendly solutions								N/A	N/A	N/A	
% of people assisted with NFIs that meet environmental criteria								N/A	N/A		
% of people assisted with the replenishment of NFIs that meet environmental criteria								N/A	N/A		

*\*Cells with colour indicate questions applicable to each indicator*

<sup>1</sup> Environmentally friendly techniques, also known as eco-friendly or green techniques, refer to practices and approaches that are designed to minimize environmental impact, reduce resource consumption, and promote sustainability.

## 5. Resources

- [Global Shelter Cluster Environment Community of Practice](#)
- [Myanmar is a place where nature still thrives - WWF](#)
- [3R Options for Shelter Components](#)
- [UNHCR Shelter and Sustainability](#)
- [Nexus Environmental Assessment Tool \(NEAT+\)](#)
- [IFRC Green Response: Environmental Quick Guide](#)
- [NFI Potential Environmental Impact Scorecard – Pilot Version](#)
- [Global Shelter Cluster Solar Energy Tool](#)
- [Properties of Five Types of Plastic Used in Humanitarian Assistance and the Impact of Plastics on Human Health, Marine Life, and Climate Change](#)
- [Guidelines for Packaging Waste Management in Humanitarian Operations](#)
- [Options for Humanitarian Packaging Reuse, Repurposing and Recycling](#)