# Climate and the Environment in Site Management

## Key Points on Site Management, Climate & the Environment:

- **Site Management strengthens safety and resilience in displacement sites:** Site Management uses climate and hazard information to reduce risks, prevent harm, and support adaptation across the site lifecycle.
- **Site Management connects analysis to action at site level:** By linking risk data, coordination across sectors, and community engagement, Site Management translates climate and hazard information into practical, community-driven improvements.
- **Community engagement drives effective action:** Working closely with displaced people ensures that risk reduction and climate measures reflect local needs and priorities, building ownership and supporting inclusive decision-making.
- **Coordination and capacity building enhance preparedness:** Site Management works with authorities, partners, and communities to plan for hazards, strengthen local capacities, and advocate for safer, climate-informed solutions, including alternatives to camps.
- **Environmental and climate considerations are integrated in practice:** Through environmental screening, nature-based solutions, and sustainable management of waste, energy, and land, Site Management reduces harm to ecosystems while improving living conditions.

## Introduction

Site Management seeks to uphold dignity in displacement, improve living conditions, and support durable solutions. These objectives are increasingly challenged by climate change, environmental degradation, and natural hazards, which intensify competition over resources, fuel conflict, and drive further displacement. Displaced communities are often more exposed to climate-related hazards, while their ability to cope is constrained by poor living conditions, including within sites. As climate impacts increase both displacement and risk for those displaced, Site Management must become more flexible, coordinated, and community-driven to maintain safe and dignified conditions.

Mitigating risks from natural hazards is a core function of Site Management, delivered through risk-informed site selection and development, preparedness and contingency planning, and ongoing care and maintenance to ensure safe site environments. Site Management actors have also sought to reduce the climate impact of sites by limiting environmental degradation, including through site planning, coordination of waste and energy solutions, and advocacy for lower-impact alternatives to camps. Mainstreaming environmental considerations contributes to Safe and Dignified Environments, a key area of focus within the 2025–2029 Cluster Strategy.[1]

Site Management integrates risk analysis, cross-sector coordination, and daily engagement with community structures, transforming hazard and environmental data into concrete, community-driven site improvements. By linking technical analysis with the priorities and experiences of displacement-affected populations, Site Management ensures that climate and risk-reduction actions are both technically sound and people-centered. In doing so, it serves as a critical operational bridge, enabling practical, climate-responsive solutions at the site level.

In line with the IASC Climate Crisis Roadmap (2024),[2] Site Management actors also operationalize the commitments of the “Climate Charter”,[3] including through coordinated action at national and sub-national levels. The 2025–2029 Cluster Strategy also prioritizes Adapting to Climate Change, including by aligning site management practices with climate resilience strategies, and by working with authorities, humanitarian partners, and affected communities to strengthen preparedness and contingency planning, including for climate-induced displacement.

The 2025 Humanitarian Reset, including the merger of the Shelter and CCCM Clusters and HLP AOR, presents a timely opportunity to strengthen climate-resilient, low-impact site design and management, and enhancing climate preparedness in ways that align with the Reset’s focus on efficiency and resilience in life-saving operations.

[1] Global CCCM Cluster Strategy [2025-2029] | CCCM Cluster
[2] IASC Climate Crisis Roadmap 26624.pdf
[3] Climate Charter, The Climate and Environment Charter for Humanitarian Organizations.

## Climate, the Environment and Site Management

Climate and environmental risks directly affect the safety, dignity, and wellbeing of displaced communities in sites. Site Management links risk analysis, coordination, and community engagement to translate climate information into practical site-level action. It influences how sites are planned, operated, adapted, and transitioned, shaping risk exposure and protecting ecosystems and resources relied on by displaced and host communities. Site Management continues to advocate alternatives to camps that have lower environmental impact and are less vulnerable to hazards; and Site Management actors increasingly prioritize measures to reduce their operational environmental footprint.

Site Management integrates hazard and climate risk information across the site lifecycle; from site selection, layout, expansion and decongestion to site closure and decommissioning; reducing exposure to floods, storms, heat, erosion, and landslides. Environmental screening at each stage ensures that interventions minimize harm while supporting sustainability. Day-to-day care and maintenance activities, including drainage management, slope stabilization, flood-resilient communal infrastructure, and heat-mitigation ensure sites are safe and habitable. In coordination with other service providers, Site Management also often oversees waste management, land use, and energy solutions to reduce pollution, deforestation, soil degradation, and emissions, improving living conditions while delivering environmental and climate benefits.

In line with the Sphere Guide on Nature-based Solutions for Climate Resilience in Humanitarian Action,[4] Site Management actors have integrated measures such as vegetation for erosion control, restored drainage systems, and shaded communal areas to enhance site safety and environmental sustainability. These climate adaptation measures also help reduce the likelihood of repeated displacement and limit losses from climate-related shocks. Similarly, through community engagement and its role in planning and managing site infrastructure and services, Site Management enables access to energy-efficient and renewable solutions that support safer, lower-impact site operations. Clean cooking initiatives, for example, provide positive health, protection and safety outcomes, and enable people to engage in productive activities, supporting self-reliance, while limiting environmental degradation. Mitigating environmental degradation is a core responsibility of Site Management Agencies, embedded in the Camp Management Toolkit (2015)[5] and the Minimum Standards for Camp Management (2021).[6]

Site Management actors play a central role in coordinating and leading site-level contingency and preparedness planning, including for climate-related hazards, bringing together communities, authorities, and service providers to assess risks, coping strategies, community capacities, and existing response mechanisms. In this role, Site Management acts as the operational link between risk analysis, sectoral response, and community action. Based on these assessments, Site Management develops contingency plans, early warning systems, and evacuation arrangements, while raising awareness on risks, and empowering community volunteers to monitor hazards, lead evacuations, and maintain sites. This ensures preparedness is participatory, inclusive, and responsive to vulnerable groups. Through this coordination and engagement, Site Management enhances the safety, functionality, and preparedness of displaced communities, enabling timely, context-appropriate, and collectively owned responses.

By combining forecasts, site-level data on climate exposure and environmental conditions, and the knowledge and experiences of communities, Site Management can monitor hazards, anticipate risks, and trigger timely actions to keep sites safe and habitable. This information also guides investments in site upgrades, relocation, and climate-resilient infrastructure, and supports advocacy on alternatives to camps.

At the area and national levels, Site Management actors have worked with authorities and other stakeholders to ensure that the risks faced by displacement-affected populations, and the corresponding responses, are integrated into inter-sectoral emergency and disaster risk reduction strategies. In doing so, they help link humanitarian and local disaster management systems, supporting national authorities in localizing climate adaptation while strengthening the capacity of local authorities and community leadership. By collecting data on risks affecting site populations, and those at risk of displacement, Site Management provides evidence to advocate governments, donors, and other clusters for risk reduction measures and climate-smart investments in risk-prone areas. Additionally, Site Management promotes alternatives to camps that typically enhance living conditions for displaced people and have a smaller environmental footprint. Through engagement in climate and environmental planning, Site Management promotes safer living conditions, more inclusive and equitable responses, and stronger durable solutions for displaced populations, while enhancing environmental sustainability and empowering local leadership in climate preparedness.

[4] Nature-based Solutions for Climate Resilience in Humanitarian Action | Sphere
[5] Camp Management Toolkit | CCCM Cluster
[6] Minimum Standards for Camp Management

Through strong relationships with displaced people and communities, cross-sector coordination, and close engagement with authorities, Site Management ensures climate and environmental risks and opportunities are addressed in a people-centered, coherent way, aligned with local and national systems. By engaging a wide range of stakeholders and supporting communities to lead the design of adaptation and mitigation plans, Site Management prevents fragmented or maladaptive responses that could arise from limited participation or disconnect from broader plans. This approach builds ownership, promotes sustainable solutions, and ensures that climate and environmental actions reflect people's priorities while delivering tangible improvements at site, sub-national, and national levels.

## Conclusion

As climate change intensifies displacement risks and environmental pressures, Site Management plays a critical role in ensuring humanitarian responses remain safe, dignified, inclusive, and sustainable by translating climate and environmental commitments into practical, day-to-day decisions that reduce risks, curb environmental harm, and support adaptation and long-term solutions. Through multi-sectoral coordination and strong community engagement, Site Management occupies a unique position that enables climate-informed planning, evidence-based advocacy for alternatives to camps, and pathways toward durable solutions. By embedding climate and environmental action across its work, Site Management improves living conditions, mitigates repeated displacement, and fosters more equitable, sustainable outcomes for both displaced and host communities.

## Examples of Climate Action in Site Management practice

**Syria**

Across displacement-affected areas in Syria, many households have relied on kerosene, firewood, and waste for heating, driving deforestation, worsening indoor air pollution, and exposing women and children to protection risks during fuel collection. To address environmental degradation and meet energy needs more safely, a Site Management Agency introduced a greener winterisation package through distributing low-emission heating pellets produced from agricultural residues such as olive pomace and orchard prunings in camps and collective centres.

The pellets offer higher efficiency, reducing fuel consumption and fire risks in densely populated settings, while lowering harmful emissions and improving indoor air quality. By reducing reliance on firewood, the intervention also alleviates pressure on local ecosystems. The initiative also generated livelihood opportunities for producers in host communities, demonstrating how cleaner energy solutions can deliver integrated environmental, protection, and socio-economic benefits.

**South Sudan:**

In and around Bentiu IDP Camp, repeated flooding between 2021 and 2023 linked to climate change destroyed shelters and farmland, and disrupted livelihoods affecting displaced residents and driving new displacement. Women were particularly affected, as the loss of agricultural opportunities increased vulnerability and protection risks.

The Site Management Agency implemented a site-based initiative linking women's empowerment with climate resilience. Women participants developed climate-adaptive solutions such as floating gardens, enabling vegetable cultivation in flood-affected areas and reducing safety risks from seeking livelihoods outside the site. They also led awareness-raising activities on climate change, women's participation, and gender-based violence. A Women's Innovation Hub offered a space for learning and skill-building, enabling women to lead community projects that simultaneously enhanced climate resilience and reduced GBV risks. Furthermore, women's perspectives were better integrated in decision-making across broader site operations, including the site environment.

**Yemen:**

In Yemen, a Site Management Agency supported site committees and landowners to implement a cost-effective, community-led "green belt" initiative around an IDP site, based on a need identified and solution proposed by the community itself. Community members played a central role in the design and implementation, planting rows of trees along the perimeter of the site supported by a water-efficient drip irrigation system.

The site was in an open sandy area exposed to high winds and severe soil erosion, which undermined shelter stability, damaged infrastructure, caused respiratory and eye irritation, and increased fire risks. The green belt helped stabilize the soil, reduce sand movement and erosion, and act as a natural windbreak, improving overall site safety and living conditions. In addition, it enhanced soil moisture retention, provided shade, and promoted environmentally sustainable land management and water conservation practices.