

Minimum Requirements for Climate-Smart Shelter



This guidance sets out CARE's definition of Climate-Smart Shelter and summarises its minimum requirements. It was prepared for CARE country offices designing or implementing humanitarian Shelter projects and includes information for developing concept notes, project proposals and project implementation plans.

If you have any questions or would like help implementing Climate-Smart Shelter, contact the Global Shelter Team: emergencyshester@careinternational.org

Overview

How is climate change relevant to CARE's Shelter programming?

Climate change is causing more pressure on already-vulnerable people and communities in crisis and disaster contexts. Climate change can even be one of the triggers of conflict and/or displacement. CARE recognises that displaced and disaster-affected communities are especially vulnerable to the impacts of climate change. Extreme heat and flooding, as well as storms, extreme cold and fires, are risks that impact not only people's shelters and settlements, but also their livelihoods, health and other aspects of their lives and, therefore, recovery. Women and girls are disproportionately impacted by disasters and crises, inadequate post-crisis living conditions, and the direct and indirect impacts of climate change, including on health. Preparedness, emergency response and early recovery activities should enable and support local communities to prepare for climate risks, adapt to climate change and build resilience, in alignment with [CARE's 2030 Vision](#) and CARE's [Shelter Strategy](#).

What is Climate-Smart Shelter programming?

Climate-smart humanitarian programming, as defined by IFRC, consists of:

Integrating available climate and weather information, both short-term weather and seasonal forecasts and long-term climate projections, in designing and/or adjusting all programmes and operations to ensure that, at a minimum, they do not place people at increased risk from new climate extremes and, if possible/appropriate, empower communities to anticipate, absorb and adapt to climate shocks and long-term changes. (IFRC, 2023)

For Shelter programming to be climate-smart it should integrate climate and weather information into the design and implementation of Shelter solutions whether it be at the emergency stage, during early recovery or longer term, so that communities are better placed to anticipate, absorb and adapt to climate shocks and long-term changes.

A focus on climate change adaptation

[Climate justice](#) underpins CARE's approach to climate change; the burden of climate change mitigation (such as carbon emissions reduction) should not fall on the economically disadvantaged. No compromises to programme outcomes should be made to reduce greenhouse emissions when the impact of such adjustments is insignificant and the responsibility lies not with the communities we serve, who historically have had negligible contribution to the issue. Therefore, CARE's Shelter programming should prioritise the integration of climate change adaptation as part of climate-smart programming. Climate change adaptation (CCA) is defined as:

The process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities. (IPCC, 2022)

CCA should be integral to Shelter and Settlements (S&S) programming, rather than a luxury add-on. Adapting to the reality of more frequent and intense climate hazards is vital for impactful S&S programming and sustainable post-crisis communities. Shelter interventions should minimise risks from climate extremes as well as other environmental and human hazard risks and empower communities to adapt to future shocks and long-term climate and wider environmental changes. CCA involves proactive measures to ensure shelters and settlements are resilient to climate-related hazards, while also considering environmental sustainability and locally appropriate S&S solutions. This is not to ignore climate change mitigation, nor wider environmental sustainability issues. Climate-smart programming can contribute to climate change mitigation and adaptation and environmental protection (for example, through nature-based solutions and provision of solar lighting) and such 'triple wins' should be encouraged.

See the CARE/Global Shelter Cluster publication [Sheltering in the Climate Crisis: Learning to Adapt](#), which contains further information related to climate change adaptation and wider environmental considerations, resources for conducting risk assessments, and links to shelter design tools that support the integration of features to combat extreme heat and improve ventilation.

The Minimum Requirements

Climate-Smart Shelter is a process, or an approach, rather than a series of pre-determined products or rigidly defined activities. [CARE's Shelter principles](#) underpin the climate-smart approach, so all activities should aim to support resilient self-recovery and be inclusive of women and girls.

The key components of Climate-Smart Shelter

The five components of a Climate-Smart Shelter approach aim to enhance resilience, reduce harm, and contribute to durable solutions for communities affected by climate change. Climate change is one element of environmental change and should not be viewed in isolation. Climate-Smart Shelter should also include awareness of Shelter and Settlements' connections with Health, Livelihoods and pathways to recovery and incorporate gender sensitive (and ideally gender transformative) processes.



CLIMATE SMART SHELTER

The Minimum Requirements

All risks assessed

Climate-Smart Shelter should start with a multi-hazard, multi-sector risk assessment.

Focused on adaptation

Climate-Smart Shelter should be an adaptation-focused process leading to climate-resilient Shelter and Settlement outcomes.

Climate-risk informed

Climate-Smart Shelter should use best-available climate change information to inform Shelter and Settlement process, design and implementation.

Community-led

Climate-Smart Shelter should be community-led, with meaningful involvement from those who best understand their local context and adaptation needs.

Environmentally sustainable

Climate-Smart Shelter should minimize environmental damage, enhance environmental protection, and build resilience.

For resources and tools to support the Climate-Smart Shelter process, see the CARE/ Global Shelter Cluster publication [Sheltering in the Climate Crisis: Learning to Adapt](#)



The Minimum Requirements explained

All risks assessed

Climate-Smart Shelter should start with a multi-hazard, multi-sector risk assessment.

Climate-Smart Shelter should never be done in isolation but rather as part of a broader, multi-sector, multi-hazard, settlement-level risk assessment – ideally related to an area-based DRR framework. Such risk assessments begin with an analysis of all hazards affecting the community with no sectoral separation. Climate-related hazards are one part of a multi-hazard landscape each community inhabits. Shelter is just one sector of intervention among many others such as WASH, Protection and Livelihoods. All sectors must adapt and build resilience towards these hazards, and communities should be facilitated to develop their own holistic masterplans that strengthen resilience.

There are many DRR frameworks and manuals for such risk assessments, especially from the development sphere (see links to resources below). It is important to draw from these and develop an appropriate and pragmatic framework for each context, in collaboration with local actors familiar with the context. This multi-hazard risk assessment process should ideally be community-led, first identifying all the hazards they have faced and expect to face in the future and then analysing their vulnerabilities and capacities to these hazards. The latter stages identify capacity gaps and then propose projects (e.g. shelter/ WASH/ infrastructure/ livelihood etc. without sectoral constraint), as communities frequently know their risks and contextually appropriate solutions to address them. This process could include:

- **Hazard mapping (including climate-related hazards)**
- **Vulnerability assessment**
- **Capacity assessment**
- **Identification of capacity gaps**
- **Developing a prioritised plan of activities (sector specific or multi-sector) to address these gaps.**

Within a DRR framework it is a good idea to initiate Shelter-focused sub-sessions that explore the specific hazards, vulnerabilities and capacities related to people's shelters and settlement needs.

Focused on Adaptation

Climate-Smart Shelter should be an adaptation-focused process leading to climate-resilient shelter and settlement outcomes.

Climate-Smart Shelter is a process that should result in more durable shelter and settlements, successfully adapted to the evolving context-specific climate related hazards. In addition to resilience to hazards such as floods and storms, thermal comfort and ventilation should be considered, with awareness of likely future temperatures and air quality. The climate-smart process should always focus on adapting S&S interventions so that community resilience to climate-related hazards is strengthened. While climate-blind Shelter may still result in durable outcomes, only climate-smart approaches can ensure that interventions and designs have been tested against all available knowledge—local and scientific—to address future contextual climate risks. A shelter with a strong roof can still be inundated by flood waters; being focused on a holistic design process will avoid the blind selection of token ‘green’ features.

Climate Risk Information

Climate-Smart Shelter must use best-available climate change information to inform S&S process, design and implementation.

Climate information must inform all risk assessments and subsequent shelter and settlement interventions. While communities and practitioners may have some awareness of climate change, they often lack access to forecasts, current hazard models and climate projections. Local knowledge must be valued alongside climate science. These two perspectives should be brought together in respectful exchange.

1. Local Knowledge

Support communities in sharing their experiences of climate change and how they’ve adapted through behavioural or construction changes. Questions about people’s experiences of changing climate and weather patterns, and their adaptation practices, should be included in needs assessments where possible.

2. Climate Science

Using risk communication approaches ‘translate’ climate forecasts into clear, relevant messages that can be shared with communities to validate local experiences and inform decisions on evolving risks.

Climate information should be curated to relate to community resilience and vulnerabilities in vernacular shelter design, focusing on specific local/regional trends and likely climate risks rather than broad global trends unless needed for context.

Community Leadership

Climate-Smart Shelter should be community-led, with meaningful involvement from those who best understand their local context and adaptation needs.

Following climate-related shocks and other crises, affected communities are almost always the first responders, possess deep local adaptation knowledge, and have the greatest stake in recovery. To ensure effective outcomes and future preparedness, it is vital to maximize community ownership and agency in the Shelter process. This means placing communities at the centre of designing, implementing, and evaluating activities. Maximising community ownership, agency and decision making by all community members - women, men, girls and boys and other relevant groups, throughout all project phases, leads to stronger, climate-smart outcomes. Key approaches include:

- Engaging households, builders and other local stakeholders to integrate vernacular shelter knowledge and practices into design decisions.
- Valuing and incorporating community narratives on climate change alongside scientific data.
- Sharing climate science through accessible risk communication for informed community decisions.
- Giving communities real decision-making power, including veto authority over designs.
- Supporting community-led evaluations to determine project success and identify lessons learned.
- Ensuring the full participation of all community members—women, girls, older people, and persons with disabilities—to make sure the identification of needs and solutions is inclusive and intersectional.

Environmental Sustainability

Climate-Smart Shelter should minimise environmental damage, enhance environmental protection and build resilience.

While Climate-Smart Shelter focuses on adaptation for future resilience, it must not compromise present ecosystems nor endanger environmental sustainability. There are also triple wins to be made in terms of climate adaptation, mitigation and other environmental activities when, for example, nature-based solutions can address all three. Climate-Smart Shelter should:

1. Minimise Environmental Impact

Shelter planning should assess and reduce environmental harm from construction and operations. This could include, for example, plastic waste, deforestation, or water system disruption.

2. Strengthen Environmental Systems

Beyond minimising environmental harm, Shelter programmes can enhance resilience by supporting natural systems through nature-based solutions. This could include, for example, integrating green spaces into settlement plans, planting natural buffers for shelter protection or reinforcing renewable resources such as bamboo forests.