

Building Climate-Resilient Homes and Communities

OVERVIEW

Around the world, climate change is making life nearly impossible for vulnerable communities as erratic rainfall, more frequent and catastrophic storms and more prolonged droughts decimate lives and livelihoods. At Catholic Relief Services, we see the impact of climate change everywhere we work. Our partners are emphatic about the enormous human, societal, economic and ecologic toll climate change is having on the most vulnerable people who have done little to cause the climate to change, but are bearing the brunt of its consequences.



CRS helped vulnerable families in Madagascar rebuild their homes after Cyclone Ava in 2018. Photo by David Snyder/CRS

CRS is working to ensure people living in poverty—those most impacted by climate change—are able to manage risks, recover, adapt and build their resilience in the face of this escalating threat. Combatting the effects of climate change is an integral part of our Vision 2030 strategy, as we seek to create a world where humankind prospers in harmony with our natural environment. Our efforts are focused on agriculture, disaster risk reduction and humanitarian response and recovery.

One of our strategic priorities is ensuring that people affected by crisis have safe and dignified homes and communities—work that is directly impacted by climate change, and that can contribute to greater resiliency to its effects. CRS has set the ambitious goal of building 1.5 million homes for climate disaster and conflict-affected

families by 2030, then leveraging our results to contribute to an additional 8.5 million vulnerable families living in safe, dignified and durable homes.

A CLIMATE-RESILIENT APPROACH TO POST-DISASTER RECONSTRUCTION

The increased intensity of disasters caused by climate change is destroying homes and causing people to flee their communities at unprecedented rates. The World Bank estimates that up to 216 million people could be forced to migrate by 2050—and all of these people will need to find new homes.

Last year, flooding caused by heavier than normal monsoon rains and melting glaciers damaged 2 million homes in Pakistan; homes across southern Africa were washed away by unprecedented flooding; and drought contributed to a food crisis and massive displacement in East Africa and the Sahel.

Safe homes are the first step for uprooted families to rebuild their lives and are absolutely essential to reduce the danger of future climate-driven disasters. CRS is committed to providing the growing number of displaced people with access to comprehensive shelter solutions that enable families and communities to recover and flourish—and adapt to an ever-changing and increasingly unstable environment. We support vulnerable communities to prepare for crises before they strike, alleviate impact and loss, and strengthen resilience



After Super Typhoon Haiyan slammed into the Philippines in 2013, CRS supported the reconstruction of 20,000 homes. In December 2014, the homes withstood a typhoon and tropical storm with minimal damage. Photo by Kim Pozniak/CRS

for the long-term—working alongside families themselves to build and rebuild homes and communities in climate and environmentally responsible ways.

CRS recognizes the interconnection of the spiritual, human, social, political, financial, natural and physical aspects of people’s lives. Disaster risk reduction and preparedness has been at the center of our comprehensive housing reconstruction programming for decades. Our goal has always been to accompany communities along their journey of recovery with holistic support to increase their resilience.

Rebuilding safe and dignified homes and communities can have significant negative environmental impacts during and after a disaster if poorly planned and implemented. Conversely, environment and climate-

conscious reconstruction has the potential not only to minimize negative environmental impacts, but to help communities adapt and prepare for future calamities. In the words of the International Monetary Fund, implementing these adaptation measures alongside mitigation work is smart: “Every \$1 invested in adaptation could yield up to \$10 in net economic benefits....The benefits of adaptation measures are obvious and save money in the long run, but they require up-front costs that are a struggle for many developing economies.”¹

ESSENTIAL PRACTICES

CRS and our partners have provided emergency relief and support for more than 2 million refugees, internally displaced people, asylum seekers and climate migrants across the world over the past 10 years. With over 75 years of experience across more than 100 countries, we have built rich partnerships at the grassroots, national and international levels, and developed innovative practices that are replicated worldwide for greater reach, efficiency and lasting impact.

As a leader in the field, and through our experience implementing shelter projects across more than 65 countries—directly supporting 300,000 people each year on average—we have identified the following best practices for building safe, dignified and resilient homes and communities. These 10 Essentials are at the heart of our recovery and adaptation work, and we are confident that practical experience conclusively demonstrates that they are necessary for building homes and communities that can not only survive, but thrive, in the face of growing climate risks.

1. [Incorporate local practices and preferences](#) in shelter design and construction, respecting local priorities for what makes a home, to empower communities, build on existing strengths and capacities and increase the likelihood of uptake and replication.
2. [Use local materials, working through local vendors](#), to the maximum extent possible to reduce greenhouse gas emissions, bolster the local economy and contribute to cost-effectiveness and ease of maintenance and repair.
3. [Incorporate simple, low-cost, disaster risk reduction design elements](#) that are [responsive to local conditions](#). For example, houses that are destroyed by earthquakes should be rebuilt with salvaged materials, stronger foundations and

¹ [What is Mitigation vs. Adaptation](#), by Adam Behsudi, IMF Finance & Development

cross-bracing on joints. Houses destroyed by floods should be rebuilt with raised plinths, overhanging roofs and community-managed drainage systems.

4. [Work with and train local artisans, craftspeople, carpenters, and masons](#) to ensure sustainability, replication, and ease of maintenance. [Employ these trainees to build model homes](#) to support the significant number of families who will manage their own recovery.



After devastating earthquakes hit Nepal in 2015, CRS trained local masons in earthquake-resilient construction techniques. Photo by Jenifer Hardy/CRS

5. Transitional shelter designs should [allow for homeowner adjustments and incremental enhancements over time](#) to promote a transition to permanent housing.
6. Merely working with women and girls when selecting program participants is insufficient. Effective relief and recovery programs must [actively engage, consult, and promote women's voices and ownership](#) at all stages of design and implementation.
7. [Use a sliding-scale approach](#), in which the most vulnerable families receive the most intensive, hands-on support, while other families receive cash, supplies and/or technical assistance, but handle most of the construction themselves. This approach maximizes ownership, agency and creativity, while adhering to design essentials and ensuring the most vulnerable people aren't left behind.
8. [Work closely with local government](#) throughout the design, implementation and monitoring phases to maintain compliance with local building codes; ensure participants receive additional compensation they may be entitled to; access government materials, equipment, or resources for enhanced cost efficiency; and increase overall impact by influencing government housing standards and policies that promote replication of the 10 Essentials on a much larger scale.
9. Post-disaster housing reconstruction should take a comprehensive, [area-based approach to address](#) issues of health, utility provision, livelihoods and education—components that are critical to the success or failure of homes and communities and for recovery and resilience. To be successful in the long-term, there simply is no substitute or shortcut to a participatory approach to home design, building practices, urban planning, and community layout.
10. Privacy, dignity, mental health and [cultural sensitivity](#) are must-haves, not nice-to-haves, especially in a post-disaster context, for building climate-resilient communities.



CRS helped Mercedes rebuild her home in Guatemala after it was destroyed by hurricanes Eta and Iota. The home was built using low-cost hurricane resilient techniques, including concrete blocks and boards for walls and a concrete floor. Photo by Dinorah Lorenzana/CRS