



The goal was also to provide construction solutions that were affordable, replicable and achievable by the most vulnerable households.
Photo by Eldson Chagara/CRS

Malawi

MALAWI FLOODS AND RAINS RECOVERY PROGRAM FLOODS AND RAINS

Disaster/conflict:	Floods and rains
Disaster/conflict date:	January 2015
Project timescale:	May 2015 – January 2016* (9 months)
Affected population:	638,000 people affected; over 170,000 displaced
Target population:	1,350 households in Phalombe, Zomba and Machinga districts
Modality:	Distribution of tools and materials
Material cost per shelter:	US\$200
Project budget:	US\$746,828

* The project was active at the time of publication.



RESPONSE ANALYSIS

In January 2015, heavy rainstorms and floods affected 630,000 people in Malawi. Protracted immersion or flow of water damaged or destroyed dwellings and displaced over 170,000 people, with timber and roofing material also lost to the floods. Catholic Relief Services conducted a physical survey of Phalombe, Zomba and Machinga districts to assess damage and needs, including interviews with householders, focus group discussions with communities and interviews with local government units and nongovernmental organizations.

Based on identified needs and the local market context—as well as feasibility, protection and security, and beneficiary preferences—CRS chose to provide in-kind support, coupled with trainings to communities and local builders.

Shelter needs

During the rainstorms, returnees found shelter with neighbors or relatives, stayed in the remains of damaged houses or constructed makeshift shelters using local materials such as bamboo and grass. Despite weeks of immersion in water, many houses survived with little or no damage, including those constructed using earth blocks, mud render (plastering) and mud mortar. Traditional houses with raised platforms, hipped roofs (sloping on all sides) with large overhangs and a veranda, and well-maintained roofs and walls were generally in good condition following the floods.

Assessments and interviews conducted by CRS found that all households intended to repair or reconstruct homes during the dry season using traditional building techniques and materials. Due to the likelihood of similar future disasters, CRS determined that emergency repair and reconstruction needed to be accompanied by appropriate risk-reduction strategies to reduce vulnerability, including siting and construction of dwellings and coping strategies.

Market context

The poorest households could not afford to buy materials such as burnt brick, cement and corrugated iron sheet roofing. Earth for block-making and grass for thatching were locally available, but other materials needed to be bought, including plastic membranes (sheets), timber, nails and fixing wire, some of which were not available in local markets. Timber poles for roof construction and support were in limited supply; demand for timber poles had inflated the price and reduced availability in local markets, and could lead to deforestation. Meanwhile, long distances to travel to local markets could lead to problems with transport and time.

Households needed to salvage and replant crops, as the loss of crops had a major impact on food security and cash-generating livelihood opportunities. The need to prioritize funding for food was a major obstacle for meeting shelter needs. CRS originally planned to provide cash grants to support households to buy their own materials. However, communities expressed a preference for materials and tools to repair or construct core dwellings, supplemented by local materials. Receiving these goods directly would enable them to focus on priority food and livelihood needs, reducing any time needed to buy materials and maximizing time spent on other livelihood activities.

Other concerns regarding the use of cash included security; the need to ensure safer building; the logistics of transporting materials and distances to markets; environmental impacts of sourcing timber locally; and controlling the use of cash. Women in particular were worried about how cash would be used and expressed concern that men would not use the cash for the intended purpose. CRS was also concerned about the method of cash distribution, as it would be time-consuming to set up bank accounts for all beneficiaries.

PROGRAM STRATEGY

CRS decided to directly procure and distribute needed shelter materials. The teams focused technical assistance on providing more resilient building solutions in compliance with the [*Humanitarian Charter and Minimum Standards in Humanitarian Response*](#), the Sphere Handbook:

- **Safe:** Resilient to multiple disasters including earthquakes, typhoons and landslides.
- **Adequate:** With good ventilation and drainage, of a good size and gender-sensitive with appropriate privacy.

- **Durable:** Materials are strong and durable enough to last 18 to 24 months.

The goal was also to provide construction solutions that were more affordable, replicable and achievable by the most vulnerable and at-risk households. These solutions prioritized the use of local materials and construction techniques. As part of this project, CRS provided training to local builders to support communities, assisted builders in designing and constructing a model house in each community, and provided information and training to each community. CRS also provided vulnerable households with the tools, materials and technical guidance required to build Sphere-compliant homes and to construct latrines.

Program goals and objectives

1. People affected by floods have access to safe and dignified shelter:

- Households have access to tools to allow the production of earth blocks and thatching material, and for the construction and repair of the houses.
- Households are provided with materials to supplement locally sourced materials to repair and construct their houses.
- Vulnerable households that cannot carry out the physical work are provided with labor to produce materials and carry out the construction work.
- Technical support and supervision is provided to all affected households to assist in the production of materials and the construction work.

2. People affected by floods construct shelters that are more resistant to floods and other hazards:

- Training, support and supervision are provided to ensure houses are repaired and constructed to standards that provide improved resistance to flooding, wind and driving rain.
- Technical support and information are provided to ensure the most advantageous site selection to reduce exposure to natural and manmade hazards.
- The wider community is provided with disaster risk reduction information and physical examples of safer construction techniques.

PLANNING AND IMPLEMENTATION

Partnership

CRS partnered with the Catholic Development Commission (CADECOM) to implement the project; CADECOM worked with local government departments and traditional authorities.

Beneficiary selection

Communities that were at the greatest risk and had the fewest resources and coping opportunities were the top priority. These included communities with houses that were damaged or destroyed by flooding, areas that were at the greatest risk of future flooding (confirmed by flood risk data), and areas that had substantial loss of crops and livelihoods and the fewest alternative livelihood opportunities.

CRS distributed tools and materials equally to beneficiaries among districts, which was calculated as a percentage of the number of affected households in each district. CRS selected households in partnership with government district offices and traditional authorities, who helped to identify households requiring assistance within selected communities. The project team verified need through household visits and prioritized the most vulnerable households, including single- and child-headed households, the elderly and disabled, households affected by chronic illnesses, and low-income families with children under 5 years old.

Value of materials

The cost of materials was approximately US\$200 per household. CRS distributed toolkits costing US\$80 to share among four families. Households supplied the bricks, thatch and labor.

Cash distribution

CRS distributed tools to assist with the manufacturing of materials and construction, following an initial induction and training. A group of households shared each toolkit, which included a selection of tools needed to produce earth blocks and to construct and repair houses. When the groups no longer needed the toolkits, CRS reassigned them to other groups. Following the completion of all work, beneficiaries handed the tools over to the Village Civil Protection Committee, a pre-existing government-initiated village authority, to provide a community tool bank to assist construction during current and future events.

Given the distance to markets, timing of implementation, and household requests for the same commodities, CRS procured all tools and materials centrally and distributed them through a voucher system. The project team distributed these vouchers once beneficiaries had met training and other requirements, including the collection of materials for thatching and the making of earth blocks. This procurement strategy also ensured that program activities did not impact the availability of local materials and further inflate prices on local markets.

Technical assistance

The project identified best building practices through workshops with local builders and used them to construct a model house in compliance with Sphere standards. These practices prioritized disaster risk-reduction (DRR) techniques to ensure that buildings

would be safer and more resilient to future rain and flooding events. The team then produced a training and information curriculum to assist communities and builders. The curriculum covered hazard and risk awareness, site selection and house orientation, building design, materials, construction, protection and maintenance of houses and the environment. The project shared these best building practices with communities, using the model house as an example, to reduce the impact of future flooding and rains upon families and communities.

The project recruited building support staff from local communities during the beneficiary selection and registration process, and included them in the orientation and technical training. The building

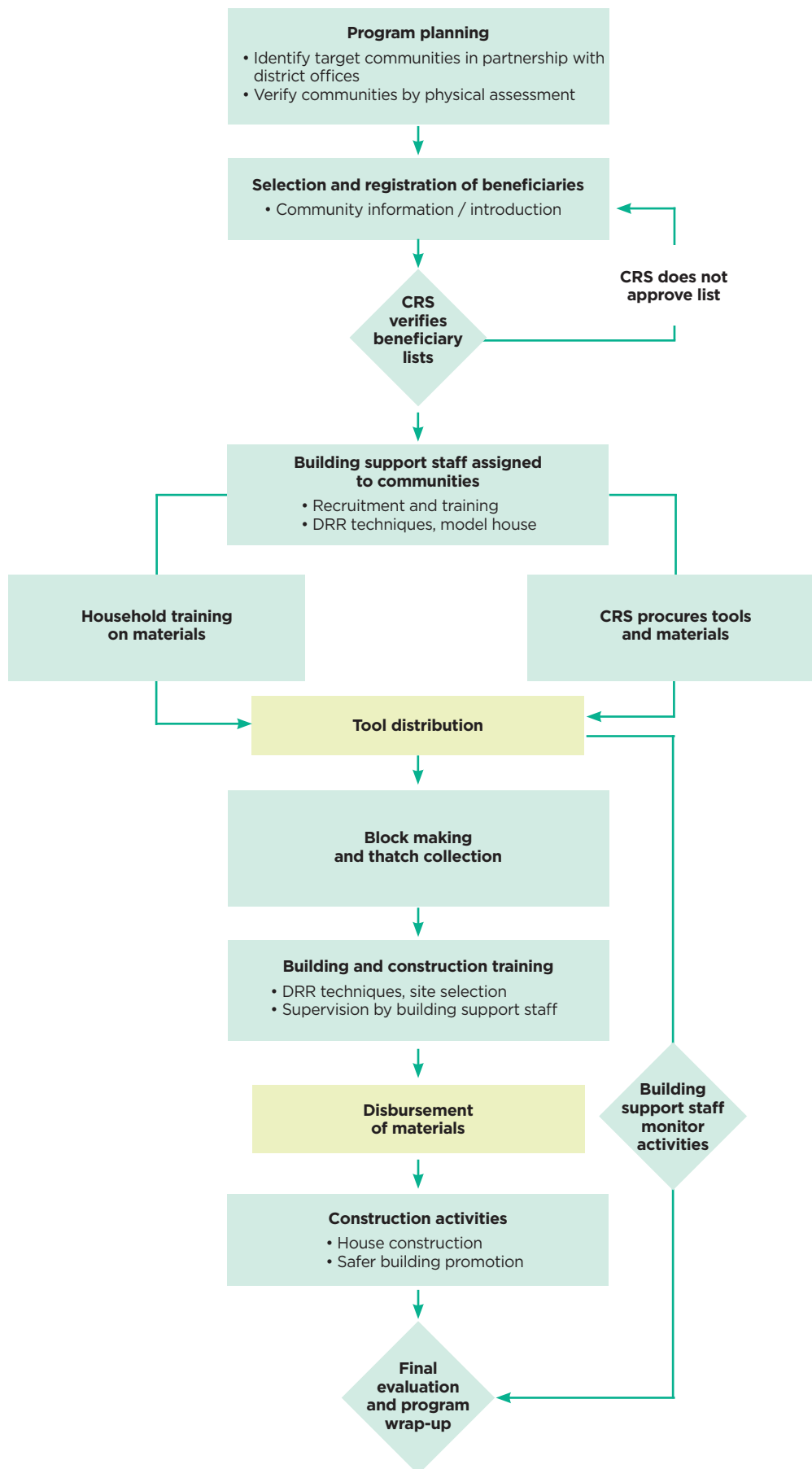
support staff was then responsible for providing training and instruction to householders and communities, assisting in the distribution of tools and materials, and providing technical support during the construction process.

Protection and security

The project advanced gender equality and female empowerment against cultural discriminatory norms by providing equal opportunities for both women and men to participate in all project activities. Men and women had equal access to information, equal representation and were involved in the work and activities in a way that was equitable, taking into consideration other work and responsibilities.

Process

The chart over the page illustrates the process of implementation.



MONITORING AND EVALUATION

CRS provided monitoring and accountability in the following ways:

- Assigned monitoring and evaluation officers to each district.
- Offered training to building support staff before conducting daily monitoring, and provided technical assistance.
- Ensured that building support staff carried out final inspections of buildings and latrines.
- Monitored the work of building support staff and ensured key messages were disseminated and understood through discussion with householders and community members.
- Produced a schedule of activities and work for each village to ensure they were completed as scheduled.

RESULTS

The program is ongoing; CRS targeted 1,350 vulnerable households to provide them with tools, materials and technical guidance to build homes and construct latrines.

ADVANTAGES AND CHALLENGES

Advantages	Challenges and risks	Actions and recommendations
The community was actively involved, enabling them to use traditional skills and knowledge that were an affordable, effective means of coping with rains and floods.	Not all households were physically able to carry out the work.	The project requested that community members provide labor to carry out the work, with financial support.
The approach was sustainable, low-cost and replicable.	The program used a different approach from other organizations providing shelter support in the area. Most other programs looked at alternative technical solutions with less regard to cost, leaving this program at risk of derision.	CRS provided representation and management so that the credibility of the program and reputation of the organizations involved were not undermined.
Project staff leveraged local capacities and authorities to implement the project and ensure it was suitable to the context.	There were management challenges and resistance to the program from the government district office in Zomba.	A full district council meeting was called in Zomba to decide on approval for the project implementation; this was granted, but without the same enthusiasm for the program as in Phalombe.
	Staff capacity and leadership was not very strong in Zomba.	Consistent support during the first weeks established standards, schedules and protocols for successful implementation of the program.
This approach could be a model for future responses and disaster risk reduction learning, and engagement with communities, and provided the opportunity to explore community-led controls. A future response may also include support for community disaster planning, including shelter strategies and options for future events.	Hard components of the program (distribution of materials and construction of model houses) could dominate the program and divert efforts away from supporting the whole community. Efforts should focus on encouraging safer building practices and supplying relevant information.	Ensure the prioritization of disaster risk reduction strategies and community engagement in the project design.

WHAT WE LEARNED

Cash may not always be the best response

option. Although the program initially planned to distribute cash, it was ultimately decided that the distribution of materials was a more appropriate response within the context. Market and needs assessments are important to establish the most relevant modality for support. Beneficiaries' preferences for assistance are also critical.

Community involvement is critical to success.

The success of the project depended on the active involvement of community groups and the implementation of traditional skills and knowledge.

The focus on promoting DRR and resilient shelter practices is likely a key success factor.

CRS' investment in promoting safe and durable shelter, despite its heavier management burden, is promising as an important part of achieving quality shelter programs. This element would have been equally critical had the program utilized a cash-based approach.