

GAZA

Return and Reconstruction after Conflict



PROJECT DESCRIPTION

Project location: Khan Younis, Rafah and Middle Area governorates, Gaza Strip, Palestine

Conflict: Operation Protective Edge July-August 2014

Project Duration: September 2014 to July 2016 (22 months)

Target Population: 484 households (2,831 individuals)

Project Budget (USD): \$6,600 (average)

Donor: CRS Private Funds, Secours Catholique, Catholic Agency for Overseas Development (CAFOD DEC), Latter-Day Saint Charities (LDS), United Nations Funding: Emergency Response Fund (ERF), Canadian Catholic Organization for Development and Peace (D&P), Islamic Relief USA, German Federal Ministry for Economic Cooperation and Development (BMZ)

Partners: Bayader for Environment and Development Association (Bayader)



What did CRS do?

CRS provided transitional shelter assistance to 484 families¹ in Gaza whose homes were completely destroyed in the conflict. This assistance allowed beneficiaries to return to their neighborhoods to begin rebuilding their homes, while living in an adequate, safe and dignified transitional shelter.

Background

Fifty-two days of intense fighting in July and August 2014, between Israel and Hamas, caused massive loss of life and infrastructure damage reducing entire neighborhoods to rubble throughout the Gaza Strip. The dense urban environment, coupled with Israel's belief that Hamas was operating in civilian areas, resulted in both military and civilian sites being targeted, causing significant impact on communities, infrastructure and agricultural land. During the conflict, Israeli forces instructed the population of Gaza to evacuate a 3km-wide zone. This area was subjected to heavy bombardment followed by ground operations that caused further destruction to homes, agricultural lands and reservoirs. Families were forced to evacuate and stay with relatives and friends or seek refuge in collective centers, mainly schools. Given the urgency of the evacuation orders, people left their homes with few possessions.

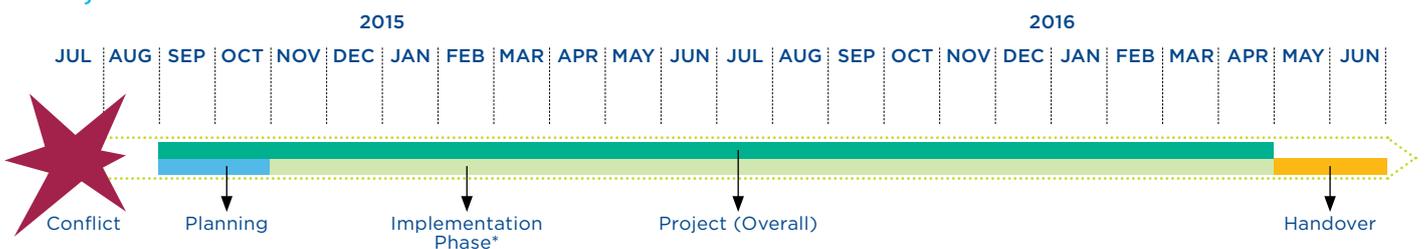
¹ CRS built a total of 470 transitional shelters, 14 of them were 2 story shelters built to accommodate a second household. As such, 484 total households received assistance, and 470 total shelters built.

Problem Statement

According to estimates from the Office for the Coordination of Humanitarian Affairs (OCHA), roughly 13% of the entire housing stock in Gaza was destroyed in the conflict. People were forced to stay with host families, find refuge in collective centers, or construct make-shift shelters on their land - an inadequate solution due to health and safety reasons, especially during the winter months given exposure to flooding and cold weather. Some families rented private apartments, however rental space was limited and expensive. It was estimated that rental prices more than doubled during the conflict. Some humanitarian actors provided caravans on temporary displacement sites, but they lacked privacy, proper ventilation and drainage, and provided poor climate comfort — oppressively hot in the summer months and bitterly cold in the winter.

In addition to dealing with insecure and undignified living conditions, other factors prevented families from starting rehabilitation or reconstruction. Greatest among them: the ongoing Israeli-imposed blockade that prevented the import of critical construction materials, such as cement and reinforcement bars - the primary materials for all buildings in Gaza. Despite the establishment of the Gaza Reconstruction Mechanism (GRM) by the United Nations, Palestinian Authority, and Government of Israel — intended to facilitate the import of construction materials — progress was slow, and families were forced to remain in alternative solutions for the long-term.

Project Timeline



*The project was implemented in different phases, depending on different sources of funding. However, the main steps were:

- 1) Project publicly announced
- 2) Home verification
- 3) Selection of most vulnerable households
- 4) Shelters completed and inspected by staff

Project Implementation

CRS and local partner Bayader developed transitional shelter designs through a series of workshops and consultations with community members prior to selecting beneficiaries. First, CRS constructed a prototype for community feedback, followed by a technical evaluation to determine the most efficient, safe and culturally appropriate construction process. With timber being one of the few construction materials permitted for import, CRS opted for a timber frame structure and employed a **consultant** with experience in timber construction to assist with the procurement and implementation of the project. Since timber construction was new in Gaza, frames were constructed in a workshop and then transported to the site for assembly by a **trained contractor**. Once assembled, the cladding, flooring and roofing materials were delivered and fitted to the frames. For additional comfort, families complimented construction with other installations such as electricity, plumbing and dry-lining. The **combination of on- and off-site construction facilitated greater efficiency and quality control**. While CRS supplied the buildings, **families were responsible for constructing and connecting the shelter to a septic tank**, as well as other enhancements such as installing electrical networks. CRS developed a user manual for maintenance on the shelters and provided families with fire safety training. CRS also assisted with monitoring and technical support, including all design and engineering, quantity surveying, and financial administration. CRS distributed a **conditional cash grant of \$500 USD** to 235 households to allow families to make enhancements such as installing false ceilings, wall partitions, tiling and shelving.

Shelter Design

Each shelter consisted of three rooms; a bedroom, kitchen and bathroom, and was designed to exceed SPHERE standards and meet cultural needs. Shelter sizes were determined according to number of occupants:

- 44m² for families up to 7 people
- 53m² for families up to 10 people
- 62m² for families with 11 or more people
- 80m² two-story shelter for extended families

Shelters provided more than 5m² per person, exceeding the recommended SPHERE standards. The L-shape design with the veranda allowed families to easily construct perimeter walls to expand the living space and allow for greater privacy and freedom of movement for women. Families were encouraged to customize the shelters according to their needs and preferences; examples of modifications included room dividers, and landscaping around the shelter. Shelters were intentionally designed to be upgraded, extended and re-purposed by families after the estimated life span of five years.

The project used an adaptation of modern platform-timber-frame construction, where panels are the load-bearing structure, as opposed to the post-and-beam technique. Prior to implementation, a timber frame structural engineer verified all the designs. The shelters were built with floor frames (a frame of floor joists) covered with decking material for the platform. The walls of each level were then fitted to the platforms. Larger families were accommodated with two-story shelters.

Involvement of Affected People

To ensure assistance was responsive to people's needs, CRS consulted with community members on the shelter design, layout and construction options (e.g. using a contractor or managing construction themselves). Feedback was documented and integrated in the final shelter design. Further, CRS provided all beneficiaries with a toll-free number where they could share any additional feedback and staff conducted regular home visits to meet with families and ensure the process was progressing smoothly. All family members, including children, were engaged during visits. A gender-balanced team of trainers ensured that both men and women in the family would feel comfortable participating in the process.

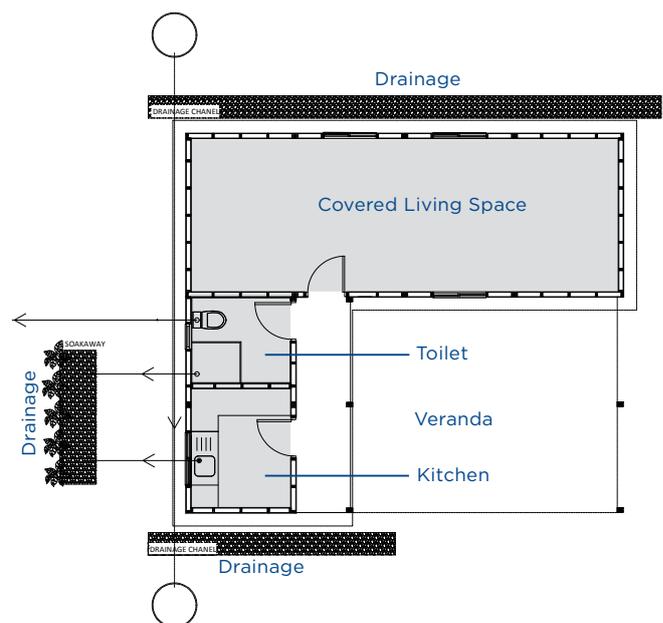
All project activities were coordinated with and through the Shelter Cluster to ensure proper coordination with other shelter actors and to avoid duplication of services.

Risk Mitigation

CRS trained families members on fire safety and provided them with fire extinguishers and electric lanterns. CRS also trained families on the risks associated with unexploded remnants of war and hazardous waste, such as damaged asbestos roofing—elements families would have to contend with during reconstruction.

Materials and Procurement

All materials were procured locally in Gaza (via Israel) due to the on-going Israeli blockade. The reliable supply of materials was indeed a major threat to the success of the project and there was little option to query the environmental sustainability of the sources. Initially, timber was available in sufficient quantities - however, later in the project, Israeli-imposed restrictions on certain dimensions of timber forced CRS to redesign the frames to adapt to the new restrictions.



The project built shelters of different sizes, to adapt to the different family sizes. Shelters included a bedroom/living area, a toilet, a kitchen and an open veranda, that could be used to expand the covered space, by adding walls. People had to take care of the external sanitation system, e.g. septic tank.

Graphic: CRS

Materials List

- White wood for the main framework
- Flooring plywood 17mm thickness
- External cladding from wood (tongue and groove)
- Internal cladding (normal gypsum boards)
- Corrugated galvanized iron (CGI) for roofing
- Vinyl for the Kitchen and bath
- Aluminium windows and doors
- Tarpaulin
- Nails and screws
- Painting material
- Sink with stand
- Toilet bowl

Participant Selection

Through public announcements, household visits and community meetings, affected families were invited to register for transitional shelter assistance. Preliminary selection was based on the following criteria:

- House was completely damaged/destroyed and uninhabitable.
- Family owned the land or had written permission to live on it for at least two years.
- There was sufficient space on the plot to build the transitional shelter.

Following the initial selection of eligible families, CRS prioritized households based on pre-existing and conflict-related vulnerability criteria—determined in consultation with local communities—such as female headed households, low-income households and families with large numbers of children, elderly or persons with disabilities.

Learnings & Recommendations

- **Communities should be involved early on**, and the shelter model should be finalized earlier in the process.
- **CRS improved efficiencies** by working closely with one contractor to build his capacity, enabling him to deliver consistent, high-quality works.
- **A more nuanced scoring criteria** was developed for future projects to ensure the most acutely vulnerable families would be selected. The new scoring process considers factors related to socio-economics, health and economic assets.

Wider Impacts

This shelter model was in high demand, as it was viewed as one of the best transitional options in Gaza, and many communities rejected alternatives such as caravans. By providing a solution that enabled families to return to their neighborhoods, the project facilitated families' ability to restart their lives and begin the process of recovery.

Where can I find out more?

Adapted from [Shelter Project 2015-16](#); A28



Laying the foundation and ground beams for the transitional shelter.
Photo: CRS



The timber-frame construction was new to the country; thus, an experienced consultant was hired and, with senior staff from CRS, supervised the contractor.
Photo: Bayader staff



Contractor staff placing CGI roofing on the shelter.
Photo: CRS



Some people were able to extend the shelters, by closing the open sides of the veranda.
Photo: Bayader staff