# SHELTER PROJECTS

## SHELTER IN URBAN CONTEXTS: 10 Relevant Case Studies

*CASE STUDIES OF HUMANITARIAN SHELTER AND SETTLEMENT RESPONSES IN URBAN SETTINGS*

**Global Shelter Cluster**
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## Shelter Projects - Shelter in Urban contexts: 10 Relevant Case Studies

Released in January 2018 by the International Organization for Migration (IOM), on behalf of the Global Shelter Cluster

All case studies are available online from www.shelterprojects.org



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Approximate prices are given in US Dollars (USD), based on exchange rates around the time of the project.


*Aerial photo of Bama, Nigeria, showing temporary IDP sites and repaired houses in an existing urban context*.

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** Note that the original codes from past Shelter Projects editions are retained on each case study.*


*IDPs fleeing conflict occupied multi-storey buildings in Baku, Azerbaijan.*

# INTRODUCTION

This booklet is a compilation of case studies of humanitarian shelter responses in urban environments, compiled from the six past editions of the interagency publication *Shelter Projects*. The series of publications, initially led by IFRC, UNHCR and UN-Habitat, is now a Global Shelter Cluster product and includes contributions from over 300 shelter practitioners from across the world, from over 50 organizations and over 70 countries, including host governments' shelter responses.

The projects described in the case studies and overviews contained in this booklet represent responses to conflict, natural disasters and complex crises, demonstrating some of the implementation and response options available within urban contexts. The case studies discuss topics including damage assessments, the use of social media in decision making, collective centre upgrades, reconstruction subsidies, housing repairs and retrofitting, materials distribution and technical assistance.

The publication is intended to support learning by highlighting the strengths, weaknesses and some of the lessons that can be learned from different projects, which try to maximize emergency funds to safeguard the health, security and dignity of affected people, whilst – wherever possible – supporting longer-term shelter needs and sustainable recovery.

The target audience is humanitarian managers and shelter programme staff from local, national and international organizations at all levels of experience. *Shelter Projects* is also a useful resource for advocacy purposes, showcasing the work done by the sector, as well as for research and capacity-building activities.

All case studies and overviews contained in this booklet, as well as from all editions of *Shelter Projects*, can be found online at:

www.shelterprojects.org

# U.1 / B.2 Azerbaijan - 1992 - Conflict - People displaced

## Case study: Upgrade of collective centres

**Project type:**
Upgrade of collective centres

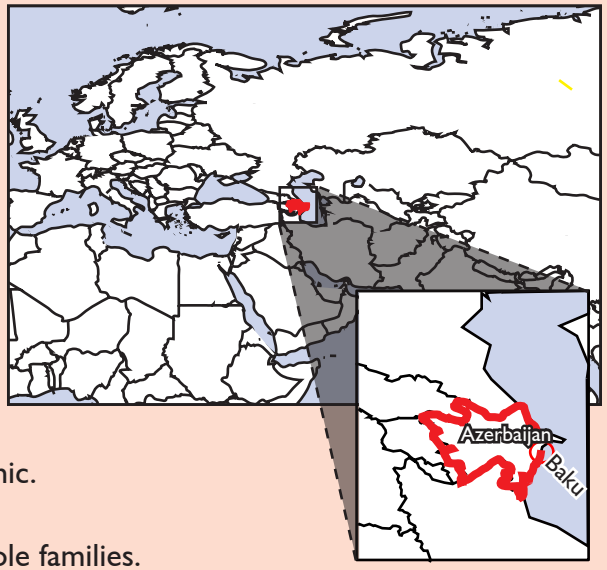
**Disaster:**
Nagorno Karabakh conflict

**No. of people displaced:**
700,000 people displaced
40,915 families (169,609 people) came to Baku in 1992-1993

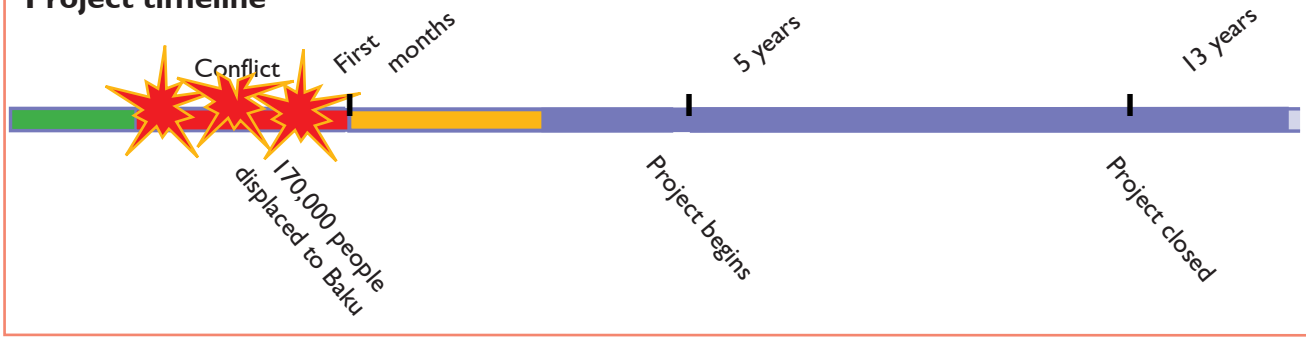
**Project target population:**
27, 500 people in over 60 buildings over 8 years

**Occupancy rate on handover:**
No data. Room allocation in the buildings is dynamic.

**Shelter size**
Variable. Individual rooms are often shared by whole families.




**Project timeline**




**Summary**

This programme upgraded and maintained public buildings that people had moved to during the conflict in Nagorno-Karabakh in the early 1990s. The project worked with families who, by the end of the project, had been displaced for over ten years. The way of working evolved over time, starting with contractor-led construction and evolving into direct implementation by the NGO. Although the project closed without a clear exit strategy, aspects of the project were taken up by the government in their housing policies.

### Strengths and weaknesses

✓ This project provided essential maintenance. The buildings were often poor to start with and had further deteriorated with the long-term displacements.

✓ The project was able to adapt its methods to improve cost effectiveness. The final approach was to directly supervise hired master craftsmen and to use contractors to provide materials.

× The programme did not have a clear exit strategy from the outset. This led to some difficulties when the project was finally closed after eight years.

× Overpopulation, lack of a sense of ownership and high resident turnover reduced the overall durability of both repair and community activism.

× The project could have included closer cooperation with the authorities for further upkeep and maintenance. Success of the rehabilitation largely depended on close cooperation and support from the local authorities, since many problems required intervention outside the public building.

This case study draws heavily on: *Project review report: Public building rehabilitation, Baku, Azerbaijan*, by Bayaz Zeynalova, 2007. (www. reliefweb.int)


Photo: NRC Azerbaijan


Photo: NRC Azerbaijan


Photo: NRC Azerbaijan

*Bathrooms before and after upgrade*

## Context

The conflict in Nagorno-Karabakh between Azerbaijan and Armenia in the early 1990s led to over 500,000 people becoming internally displaced and a further 200,000 becoming refugees. Around half of the internally displaced people moved to urban areas, most of them to the capital, Baku.

In Baku, many people moved into dilapidated, overpopulated public buildings, most of which were originally student residence halls and dormitories. The buildings were designed with rooms intended for one person, not for families of five or more. The kitchens and bathrooms were shared. In some cases the buildings were without water supply or sanitation. This was in the context of a significant growth in wealth in Baku, in part due to the oil industry.

The temporary shelter solutions found following the conflict lasted longer than was expected. Many of those displaced following the conflict had been living in one of twelve camps. The last of these did not close until 2008, after fifteen years. Upon its closure, many of the camp residents were resettled rather than being able to return to their original homes.

The climate in Baku is cool and wet in the winter and hot and dry in the summer, leading to challenges of leaking roofs and poor sanitation.

## Selection of buildings

A programme to upgrade the public buildings and schools was adopted.

Criteria for the selection of public buildings for inclusion in the programme were adjusted throughout the project period. However, the main criteria remained unchanged: at least 70% of building inhabitants had to be IDPs; other organisations could not have previously worked in the building; and the building had to be in exceptionally bad condition.

In its first years (1998-1999), the project prioritised hostels located next to each other and that shared a common yard. Such locations made repair works easier and reduced costs. Letters from local or central authorities, as well as applications from the residents, were also considered in the selection process.

The willingness of the building residents to work with the NGO was the decisive factor in the final selection. Inhabitants had to be willing to volunteer to help with repairs, and to clean corridors and shared areas. In some cases, works had to be suspended until the community agreed to fulfil the NGO's conditions.

Not everyone benefited equally from the project. Although similar works were performed in most of the buildings, several of them were only partially rehabilitated (only roof or electricity) for a variety of reasons.


Photo: NRC Azerbaijan

## Technical solutions

Inhabitants saw broken sewerage as the greatest problem in the buildings. Other common problems included shortage of water, leaking roofs and dampness. As a result, plastering, floors and ceilings in toilets and bathrooms were damaged in most buildings.

A typical repair of a public building involved:

- rehabilitation of the shared areas - toilets, bathrooms, washing rooms, kitchens and corridors;
- infrastructure repairs - electricity, sewerage, water and sewerage pipes;
- repair of roofs;
- installation of new water heaters, sinks, stoves, faucets, showers, light bulbs, circuit breakers, switchboards, windows and doors;
- installation of electricity transformers (this was not costly but served a large number of IDPs).

The most durable output of the project was the provision of electricity systems (including transformers and switchboards) and new roofs.

The project was not always successful in solving problems with the water supply. A durable solution would have required dealing with the malfunctions outside the building, which was beyond the scope of the project. Cooking stoves and taps in the rehabilitated buildings had short lifespans because many people used them.


Photo: NRC Azerbaijan

*Kitchens before and after upgrade*

## Implementation

An average building took two months to rehabilitate, with the implementation scheme being significantly improved over the years.

In the beginning, contractors were hired to implement the work. In practice, this meant that the NGO purchased construction materials and hired contractors to implement all works. The payment of labourers lacked transparency and important irregularities in the system were found. This led to the dismissal of project staff and the adoption of a new implementation scheme.

After two years of project implementation the NGO hired construction workers directly.

After five years of project implementation the NGO subcontracted a local company to supply construction materials. The supplier was selected on the basis of submitted quotes.

Over time, a good team of core construction workers, most of them IDPs, has been formed. Many of these have subsequently found work on other projects run by the NGO.

The involvement of community members in the work was seen as a key to the successful implementation of the project. The goal of the community programme was to ensure beneficiary buy-in and participation in the project. This was believed to be instrumental in creating a feeling of ownership and in the further maintenance and upkeep of the rehabilitated buildings.


*Wiring before upgrade*


*One of the occupied public buildings in Baku*

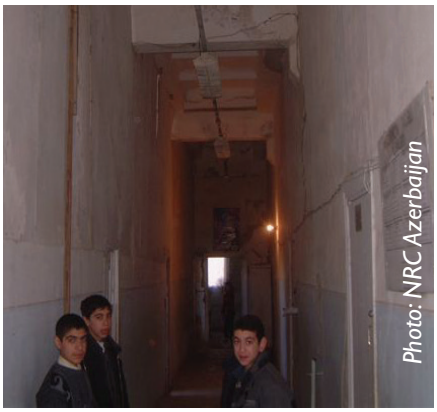
## Occupancy

A survey conducted upon the completion of the project found that all of the buildings were still occupied by IDPs. However, the occupancy of individual rooms changed constantly. Many IDP families moved out of the buildings to an outskirt of Baku. In some cases, the emptied rooms were given to local families or those moving to Baku from other regions, but usually to other IDPs. According to the building superintendents, IDPs sell their rooms to relatives or friends. Yet some also lock their rooms and keep them as a storage space.

Obviously, the families who could afford to leave the public buildings were those who managed to establish some livelihoods and were relatively well off. The remaining occupants of the public buildings are still the most vulnerable of those living in the cities.

***'The project was based on learning...We drew conclusions from the previous experience and made improvements every year. The work became more efficient over time'.***
*- Project staff member*

Along with the large-scale construction of new settlements, urban public building rehabilitation became part of the 2004 State Programme on IDPs and Refugees. In many cases the repairs implemented by the State Social Fund for the Development of IDPs have copied this project.





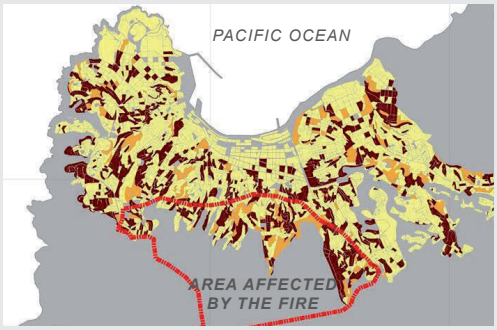
*Corridors before and after upgrade*

CASE STUDY

# CHILE 2014-2016 / FIRE

**KEYWORDS:** Housing reconstruction, Subsidies, Self-recovery, Urban

| | |
|---|---|
| CRISIS | **Valparaiso fire, Chile, 12 April 2014.** |
| TOTAL HOUSES DAMAGED | More than **3,309** destroyed (ONEMI, April 2014). |
| TOTAL PEOPLE AFFECTED | **12,500** people (ibid.). |
| PROJECT LOCATIONS | **Various locations across the city.** The affected areas were the hills in the south, particularly the ravines known as "Quebradas". |
| BENEFICIARIES | **Emergency: 2,000** households (planned).<br>**Reconstruction: 3,870** households (Target: 4,912). |
| PROJECT OUTPUTS (As of Dec 2016) | **2,000 Emergency shelters (planned[1]).**<br>**1,588 Reconstruction subsidies** (target: 2,977).<br>**1,914 Self-reconstruction projects.** |
| SHELTER SIZE | **Emergency shelters: 18m²**<br>**Reconstruction: more than 45m²** (Minimum requirement to apply for the subsidies). |
| SHELTER DENSITY | **Emergency shelters: 5.3m² per person** (based on average family size of 3.4).<br>**Reconstruction: min. 13.2m² per person** (permanent houses). |
| PROJECT COST PER HOUSEHOLD | Approx. **USD 40,000** (weighted average of the four subsidies described in this case study). |

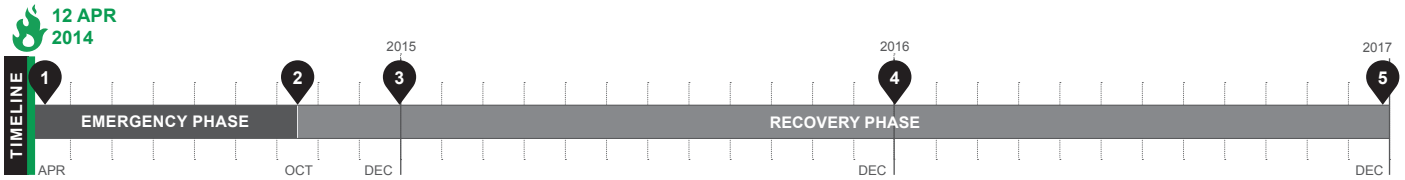



*Map highlighting the area affected by the fire and the density of the dwellings, from high (red) to low (yellow). Source: Salinas-Silva 2015.*

## PROJECT SUMMARY

This government-led programme provided four types of reconstruction subsidies to over 3,800 families affected by the fire in the steep hills of Valparaiso, Chile. The majority of the subsidies were provided through an assisted self-reconstruction scheme, whereby the funds would be disbursed along with technical assistance by architects or engineers in coordination with local NGOs, and the families would take care of rebuilding themselves.

[1] ONEMI, April 2014, http://bit.ly/2lXbLYa.




1. 17 Apr 2014: **Government agency announces the construction of 2,000 emergency shelters for the families affected by the fire.**
2. Oct 2014: **Government launches revised reconstruction plan including self-reconstruction subsidies.**
3. Dec 2014: **1,095 reconstruction subsidies granted (302 paid) 347 self-construction subsidies granted (25 paid).**
4. Dec 2015: **1,948 reconstruction subsidies granted (835 paid) 1,420 self-construction subsidies granted (382 paid).**
5. Dec 2016: **2,829 reconstruction subsidies granted (1,588 paid) 1,914 self-construction subsidies granted (961 paid).**

### STRENGTHS

+ Large-scale programme to support safer self-construction.
+ Combined action of government subsidies and NGOs.
+ The subsidies took into account people's needs.
+ The initial plan was adapted in response to the requests of the affected people.

### WEAKNESSES

- The initial response did not consider affected people's preference.
- Many families did not receive any subsidies due to land tenure issues, side-lining the most vulnerable.


*The fire on 12 April 2014 affected the hills in Valparaiso, where most of the people settled in informal land, in very dense environments, close to the forest.*


*The "Quebradas" are the ravines overlooking the city of Valparaiso, famous for their colourful houses of great aesthetic value, but also site of many hazards.*


*Access to the ravines is extremely challenging, and the density is very high, as families build on informal plots and tend to expand their dwellings over time.*

## SITUATION BEFORE THE FIRE

Valparaiso is a coastal city of about 250,000 inhabitants, famous for its colourful housing stretching across densely populated hills of great aesthetic and cultural value. The hills are also the source of vulnerability to hazards, as a significant part of the city is built informally on the 39 so-called *Quebradas* (ravines). These form a historic informal area with many land seizures, which concentrate the highest rates of poverty and unemployment in the country. The *Quebradas* have little or no connection to urban infrastructure and vehicle accessibility is generally difficult, as access is mainly provided by steep stairways up and down the hills. **The hazards in these locations** include not only fires, but also landslides and slope failures, flooding in the lower areas, as well as the ever-present earthquake and tsunami risks along the Chilean coast.

According to a survey before the fire, the inhabitants feel that "inefficient policies" of the government have failed to meet the housing demand. Many current inhabitants of the *Quebradas* moved to this location as consequence of previous earthquakes destroying their homes (in 1906, 1965, or 1985). According to interviews, especially poor communities felt they did not receive enough assistance from the government for rebuilding or repairing their houses in the city centre after these disasters, hence moving to the ravines to build their own neighbourhoods, mainly by occupying unclaimed land. In the urban area, near the port, this would not have been possible.

Moreover, the government may have added to the desire of locals to remain on these sites, as staying in an illegally appropriated site is key to its subsequent legalization. A decree states that to legalize an occupied site one must be able to prove a presence on this site (in the form of a home) for more than five years, and the site also needs to be approved by the government. However, the sites on the ravines are often not legalized after these five years, due to the precarious and high-risk locations (steep slopes or proximity to the forest). Moreover, up to the legalization, people live in constant fear of eviction and they do not trust government agencies, even in the context of post-disaster reconstruction.

**Self-construction in Valparaiso has happened for generations** and many residents work in the construction industry, developing intuitive construction knowledge, including of structural risks and possible mitigation measures. It is estimated that approximately 80% of the housing stock in the city is self-built[2].

## SITUATION AFTER THE FIRE

On 12 April 2014, a forest fire quickly spread into the urban settlements and destroyed over 3,000 homes, consuming 2,500 acres of land[3]. The fire, which was the largest urban fire in the history of Chile, also killed 15, injured 500 and left 12,500 people without a home[4].

**The fire affected especially the poorest areas,** as they were informally constructed without any urban planning, leading to a high density of structures, proximity to the forests, and poor accessibility. During the emergency, fire-trucks could not reach the affected areas, worsening the situation further. The density of construction, mainly due to extended families building large complexes on the same plot of land to live in close proximity, contributed significantly to the fire spreading faster and more devastatingly. **Some neighbourhoods were hence burnt down completely.**

Despite being at risk of future catastrophes in the current locations, most residents of the ravines affected by the fire started to self-rebuild almost the next day. **Inhabitants of the ravines returned to their homes within hours** of the fire being under control, to salvage any material goods and clean up their land, worried about losing their land and unwilling to resettle outside of the city (as intended in the initial government plan).

## INITIAL GOVERNMENT PLAN AND LOCAL REACTION

After the fire, the initial government plan was to clear everything and to rebuild the ravines in a "more orderly manner"[5]. The government also proposed to relocate citizens to safer sites, including social housing estates built outside the centre[6].

[2] Pino Vásquez and Ojeda Ledesma, 2015, http://bit.ly/2lthcAe.
[3] IFRC, 2014, http://bit.ly/2ltg7bI.
[4] Salinas-Silva, 2015, The "great fire" of Valparaiso 2014.
[5] Vergara, 2014, http://bit.ly/2kJ92zI.
[6] Social housing had been built prior to the fire but in part it was also being built in response to it.


*Houses were often built in clusters by families in the ravines of Valparaiso. These typical "Kinship-based Residential Complexes" were heavily affected by the fire, but people started rebuilding almost the next day. From left to right: January 2010; February 2012; April 2014, just after the fire; and October 2014, only six months later.*

Moreover, the Ministry of Housing and Urbanism (MINVU), **developed specific subsidies** to address the scale of the disaster, but also the particular situation of illegal settlements in the ravines. However, before the legal framework of the new subsidies was established, **the people had already started rebuilding.** The government agency in charge of emergency shelter provided 6m by 3m units that were erected on new sites and in the *Quebradas* in "safe zones" determined by the government. The shelters were deemed of bad quality by the local population, further accelerating the drive to self-reconstruction.

Within six months the ravines were nearly completely rebuilt by the local population, much faster than public management and the vision of the planners. Notably, self-reconstruction in Valparaiso **was heavily driven by women,** who traditionally lead the household in the *Quebradas*, are very attached to their homes and try to keep the extended family close together. For this rapid recovery, locals used recovered building materials, but also improved the quality of their homes, partially due to the availability of government grants for self-construction.

## ADAPTATIONS TO THE PLAN

The initial response plan by the government (relocation and emergency shelters) was heavily criticized by the local population, which resulted in the subsidies being adapted in order to be more efficient and useful for the needs of self-builders. This happened in approximately six months from the fire, thanks to demonstrations and the support of local NGOs, who consulted the residents and advocated with the government to propose alternative solutions.

MINVU's revised plan in October 2014 (with a timeframe until 2021) was to invest about USD 510 million in the reconstruction of Valparaiso's affected neighbourhood[7]. This included investment in a road around the city, as well as access roads to and in-between the *Quebradas*, and a geotechnical study of the slope stability of the affected areas.

[7] MINVU, 2016. Visit http://bit.ly/2l5vFlt.

## RECONSTRUCTION SUBSIDIES

Four separate types of subsidies for reconstruction were given to house the affected population, with the precondition that the new house be in a low risk zone (chosen by MINVU).

**1) The first subsidy** applied to families renting a property, as well as families living on their own site. It involved buying a new house with a value of 900 UF[8] or an existing house with a value of 700 UF in a new location.

**2) The second subsidy** was for reconstruction of pre-designed houses in a new location by external contractors. No completed construction was reported by the end of 2016.

**3) Subsidies for reconstruction** in the same location were also available. The payment could be done before or after construction, but in the second case a contractor must have been hired for construction. This subsidy could be used to build a house according to designs proposed by MINVU, or own designs with assistance by an architect, often from a local NGO. The house could be an individual house or a group of houses for densification of a site owned by other family members. The subsidy covered 1,050 UF broken down as follows: 600 UF for construction costs, 300 UF for mitigation measures (e.g. seismic improvements), including the structure and ground, 80 UF for site preparation and any demolition work required, and 70 UF for technical assistance by architects. Additional funding was available for site densification (150 UF) as well as for mobility-impaired residents. About a half of the construction was finalized for this type of subsidies by the end of 2016, with the remaining projects mainly in the process of construction.

**4) The fourth type** was a subsidy for assisted self-construction (ACA). This offered about the same total financial aid as the previous one, with an average of 1,090 UF assigned per family[9]. From the fire up to the end of 2016, a total of 5,090 self-construction programmes were financed in Valparaiso by MINVU, of which 1,914 were reconstruction projects, corresponding to 39% of all reconstruction projects.

[8] The Unidad de Fomento (UF) is a unit of account used in Chile and created in 1967. The exchange rate between the UF and the Chilean peso is constantly adjusted for inflation. In 2016, 1 UF was approximately USD 40.
[9] MINVU and CEHU, 2016.

* MINVU, 2017, http://bit.ly/2lhe48v. // ** MINVU and CEHU 2016.

**TYPES OF SUBSIDIES FOR RECONSTRUCTION**

| | SUBSIDY | VALUE (USD) | TARGET (FAMILIES) | PROGRESS TO DATE | SITUATION AS OF JANUARY 2017* | | |
|---|---|---|---|---|---|---|---|
| | | | | | FINALIZED | ONGOING | NOT INITIATED |
| 1 | BUYING A HOUSE IN NEW LOCATION | ~35,000 / 27,000 | 994 | 98.2% | 976 | 18 | 0 |
| 2 | RECONSTRUCTION IN NEW PLOT | ~41,000 | 761 | 0% | 0 | 684 | 77 |
| 3 | RECONSTRUCTION ON ORIGINAL PLOT | ~41,000 | 1,222 | 50.1% | 612 | 539 | 37 + 34 |
| 4 | SELF-CONSTRUCTION** | ~42,500 | 1,914 | 50.2% | 961 | NA | NA |


*Architects and local NGOs helped affected people rebuild their damaged houses, thanks to the "assisted self-construction" subsidies provided by the government.*

## SELF-RECONSTRUCTION SUBSIDY AND THE ROLE OF LOCAL NGOS

Conversations with residents suggested that **many people did not like the government-designed solutions**, as the houses were too small, built with a poor choice of materials (steel profiles + PVC), and all adopted the same design. In Valparaiso, family identity is strongly associated to diversity in style of the house, and people have a strong feeling for location and aesthetics of their homes, hence preferring staying in unsafe sites than moving to often smaller social housing or locations outside their communities.

**The ACA subsidy provided the resources to design and build a house**, as long as the beneficiary owned or had some rights over the land. This could **also include densification of a site**, in which other family members lived, which was particularly relevant in the ravines of Valparaiso.

A local NGO was very active in informing the population about the possibility to self-rebuild and assisting in the process using the ACA subsidy. The NGO believed that self-reconstruction was the best way for the local community to get involved in shaping housing that responded to the needs of each individual family.

**The role of local NGOs in sharing the information** about the ACA and the other types of subsidies was essential, as many residents were not aware of the different options available and had a general distrust in the government, mainly due to past initiatives that failed to assist them.

In coordination with local NGOs, **architects (paid through the ACA subsidy) provided technical advice to the families**, teaching them how to build their own houses, which were designed based on their needs and proposals. This ensured a safe design of the house, as well as a more lasting impact, as families often expand their houses with time. Several NGOs worked on rebuilding sustainable wood and earth structures, based on traditional construction concepts in Chile.

### THE CASE OF MINGAVALPO

A group of local architects and volunteers joined after the fire to provide a model of self-reconstruction using local and recycled materials, based on sustainability principles and a community workshop approach (*Minga*, a Chilean tradition of community self-help). The structures are built with a timber structure, walls are made of reused pallets, filled with straw mixed with mud and in some cases eco-bricks (plastic bottles filled with compacted plastic bags), finished with a mud and straw render. The result is a well-insulated house with a very low carbon footprint, for a cost of approximately USD 39,000 excluding labour, which was provided by volunteers.

Franco, 2014, http://bit.ly/2lXsKd3; Visit http://www.mingavalpo.cl/.

The statistics do not paint a full picture of the number of self-rebuilders and also crucially ignore the geographical and social component of subsidy allocation. However, it can be said that assisted **self-reconstruction is particularly popular in Valparaiso**, especially compared to the much lower number of such subsidies after other disasters, both in Valparaiso and in other Chilean cities. Similar ACA funds existed after the 2010 earthquake, but much lower numbers of these were applied for and allocated. Additionally, the subsidies were heavily improved after the 2014 fire, due to the fact that Valparaiso represents a special case in Chile, with such a high number of self-built houses.

## LAND TENURE ISSUES

Land tenure issues proved to be crucial in the context of this response, as it is often the case in similar post-disaster scenarios[10]. Given that access to the subsidy was conditional to a proof of land ownership, many households were not assisted. Several disputes over land ownership arose, but no large scale solution was found. Most of the families who knew they could not apply to the subsidy started rebuilding very quickly, replicating the same vulnerabilities that existed prior to the fire, e.g. high density, proximity to the forest and poor accessibility.

In January 2017, a new fire in the same areas affected again those who were in these hazardous situation. Although the municipality started to work towards an improvement of the land tenure situation in Valparaiso, **this example shows how the cycle of vulnerability was not broken**, even though best efforts were taken to consider the needs of the local population through the ACA subsidies.

[10] See for instance the overview A.39 of the Ecuador Earthquake in 2016.



*Local groups of architects organized building workshops to rebuild some of the houses affected by the fire on the Quebradas.*

## STRENGTHS, WEAKNESSES AND LESSONS LEARNED


*Many houses were rebuilt thanks to the subsidies, with the help of local architects. In some cases, houses were built during community self-build workshop, experimenting with low-cost materials.*


*The damage caused by fires in the ravines of Valparaiso is often extensive. Entire neighbourhoods were burnt down by the fire in April 2014. The same areas were again affected by a fire in January 2017.*

### *STRENGTHS*

**+** As of late 2016, **almost 2,000 houses had been rebuilt by their owners with the guidance of architects,** having improved construction quality, materials and size. Before the fire of 2014, the houses built in the ravines were precarious, constructed mostly with recovered materials from shelters and emergency housing.

**+ The combined action of government subsidies and NGOs** that tried to promote the use of these subsidies to help people rebuild, engaging them in the design and teaching them how to build safer.

**+ The subsidies took into account people's needs** and for instance allowed for the option of densifying a site to ensure families could live together and self-built houses could evolve with need and occupancy.

**+ The initial plan was adapted** to take into consideration the needs and requests from the affected population.

### *WEAKNESSES*

**+ The initial response did not account for affected people's preference** in terms of designs or location.

**+ Many families did not receive any subsidies** as they decided to remain and self-rebuild in informal locations, without ownership and in high-risk zones. The risk of fires spreading across the ravines hence remained, as many structures were rebuilt close to the forest. The fire in January 2017 proved that **the most vulnerable remained so,** even after this large-scale response.

### *LEARNINGS*

- **Affected people are the first responders, and will start rebuilding as soon as possible.** This response showed how recognizing this and supporting self-recovery as quickly as possible can have a significant impact in the success of the reconstruction and longer-term resilience of affected people.
- **Relocation is seldom the solution.** People settle in specific locations due to a variety of reasons, and as proved in this case they rarely want to relocate to far-away areas, distant from their social ties and livelihood opportunities, or to move into standardized housing blocks which did not cater for their needs and aspirations. **Locally sensitive, tailored solutions proved to be more effective** and accepted by the residents of the affected areas.

# U.3 / A.6 Gaza, Palestine - 2008 - Conflict

## Case study: Shelter assessments

Full case study

**Country:**
Gaza, Palestine

**Disaster:**
Conflict – "Operation Cast Lead" the war on Gaza.

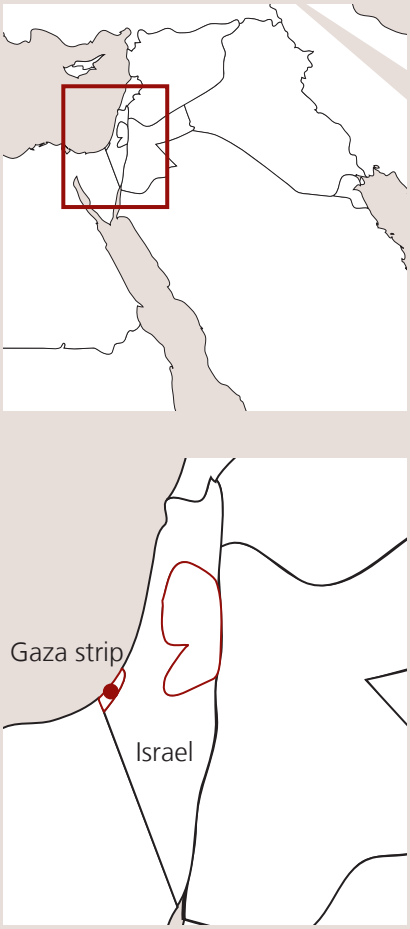
**Disaster date:**
December 27, 2008 to January 18, 2009,

**No. of houses damaged:**
60,000 shelters

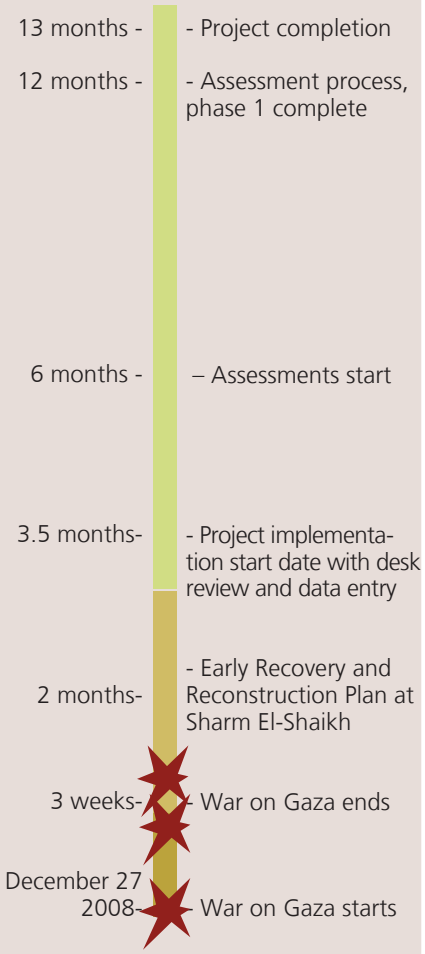
**Project target population:**
Over 12,000 assessments were conducted and 8,947 houses were real cases.
5,039 cases were deemed to be eligible for the grant.
29,420 persons had applied for cash assistance.

**Occupancy rate on handover:**
Not applicable as there is no handover

**Shelter size:**
Variable cost paid per shelter - Average of 68,000USD per house paid for destroyed houses, 14,750 for damaged houses and 1,800 for minor damage to houses.




**Project timeline**




**Summary**
The organisation implementing this project advised on the allocation of grants from families whose houses had been damaged or destroyed by the invasion of Gaza. 12,000 assessments were carried out with 5,000 found to be eligible from 29,000 applications. However, the blockade on Gaza meant that materials were not available for families to rebuild their homes.

### Strengths and weaknesses

✓ Programmes were able to adapt to the changing context.
✓ Detailed assessments of 12,000 houses were conducted in Gaza. There is now detailed damage assessment on the basis of which future payments can be made.
✓ By assessing apartments separately from the main structure of a building, those renting would also be supported by future cash payments.
✓ All houses were assessed, including houses occupied by the poorest families.
× Because much of the support early in the response had gone to families in collective centres and camps, it was difficult to encourage return.
× No housing repairs were made as a result of this program. This was due an Israeli blockade on construction.
- Due to lack of construction materials, the project had to be stopped after finishing the cost assessment.
- The cash component of the project that was planned, was intended for the purpose of building repair and construction. As construction could not happen, no payments could be made.


Destroyed buiuldings
Photo credits: CHF

## Before the conflict

The Gaza strip is very densely populated. Its current population is 1.5 million with over 4000 people per square kilometre. It has a high rate of unemployment and as a result poverty is pervasive. This was exacerbated by the blockade on Gaza, which started in June 2007. This blockade prohibits many items including building materials from entering Gaza.

In 2008, over 5,000 houses were under construction through internationally supported projects. Projects in the housing estates for refugees from 1948 were not complete, and an estimated 20,000 new housing units were needed in Gaza each year to accommodate natural growth. Additionally there were refugees living in unsanitary conditions in camps.

## After the conflict

For 23 days starting on 27 December 2008, the Israeli Army carried out a major military operation in the Gaza Strip which they called "Operation Cast Lead". The military incursion led to high levels of damage to shelter, public services as well as economic infrastructure. Blockades on goods, including cement, timber, steel, glass, and other construction materials were still in place one year after the military action.

The conflict damaged or destroyed 60,188 shelters of which 10% (6,000 shelters) were destroyed or required major repair. 600,000MT of rubble needed to be dealt with.

## The response

The emergency response was to distribute relief items. These included plastic sheeting to cover windows and damaged walls, kitchen sets, mattresses, blankets and hygiene items. Cash was also distributed to families, although a physical shortage of money in Gaza slowed down initial distributions.

Cash assistance was the major element of the response to the disaster. The de-facto government in Gaza handed out 4,000 Euro to each family who had their homes destroyed, and The Palestinian National Authority through the United Nations Development Programme handed out 5,000 USD to each family with a destroyed home and 3,000 USD to each family with major damage. People with less than 3,000 USD worth of damage received full compensation.

The same process was carried out for the refugees through the United Nations Relief and Works Agency. by the end of the conflict, over 50,000 people had found refuge in over 50 collective centres, many more had moved in with host families. Following the end of conflict, the number of families in collective centres rapidly fell as people moved in with host families.


**where buildings had many tennants - different appartments were assessed separately fromthe building**
**Photo credits: CHF**

After the invasion, the Palestinian National Authority initiated a housing rehabilitation and reconstruction program for all residents affected by the war on the Gaza Strip. This included both those displaced and those living on their original tract of land. The funding would be issued to home owners by grants through Palestinian banks which operate in the Gaza Strip.

Families had to apply to the banks to receive an amount of money that could be dedicated to rebuilding homes, or to constructing new residences on legally owned lands.

## Implementation

The organisation in this case study had a technical advisory role. The ultimate authority for allocation of grants was held by a committee. This committee included the Palestinain National Authority, the Palestinian Monetary Authority and the participating banks. The project was planned in two phases:

- Phase 1: The compensation value would be calculated which would be issued to home owners in the form of grants through Palestinian banks which operate in the Gaza Strip.
- Phase 2: To monitor the distribution of cash and serve as an advisor to the banks, authorising payments to beneficiaries. This phase did not happen as the blockade prevented construction materials from entering the Gaza strip.

The organisation reviewed approximately 29,000 grant applications and assessed the homes of 12,000 people. Entering assessment forms into a database with linked GPS data, and an overall cost for required repairs was computed for each home.

Repair costs for each home were calculated through an agreed and transparent method. This was based upon an estimate for the cost to replace or repair each type of damaged building element (such as column, footing, slab, floor or even a whole building). During assessments, detailed information such as the volume of concrete, excavations, backfilling and steel required was recorded according to pre-agreed reference tables.

## Categories of damage

- Category 4 - totally destroyed, or more than 70% of the home is damaged
- Category 3 – value of destruction greater that 5,000 USD
- Category 1 or 2 - minor damage and the value of the destruction is below US$5,000.

Damage was further categorised into apartment damage and damage to the common parts of a building. This was to enable tenants of multi-storey structures to qualify for assistance.

## Selection of beneficiaries

Families had to apply through the banks. Eligible families included

- Non refugee Palestinian citizens in Gaza Strip whose buildings were completely destroyed or who suffered from major damages that made the house unit unsuitable for living in, and who had a house in category 4 and 3
- Palestinian refugees living outside the refugee camps in Gaza Strip. The selection of these refugees outside the camps and the value of their grants still needs to be discussed between the Palestinian National Authority and United Nations Relief and Works Agency.

Buildings had to have been occupied before the war.

each building was visited by a team
Photo credits: CHF

Structural assessments required skilled engineers
Photo credits: CHF

## Damage assessment

Three different damage assessment methods were identified. Each had with corresponding forms and paperwork.

Category 1: Repair is not feasible. Assessment teams must collect additional data such as area of the building, the number of floors, original drawings or photos of the building and type of finish.

Category 2: Damage is too complex. A specialist team is required to assess the damage. This was most common for multi-story buildings where there was damage to slabs or structure in lower floors.

Category 3: Partial damage or rehabilitation is feasible. Three categories were established: excessive, moderate or minor damage.

## Staffing

To visit all of the 29,000 homes in 9 months, a team of over 160 skilled people was assembled. This is summarised below:

| no. | role | years experience |
|---|---|---|
| 96 | Site Engineers - Civil Engineers and Architects | ≥ 5 years |
| 9 | Roving Support Engineers (Electrical and Mechanical Engineers) | ≥ 7 years |
| 16 | Supervising Site Engineers (Structural Civil Engineers) | ≥ 7 years |
| 5 | Chief Engineers (Civil Engineers | ≥ 10 years |
| 10 | Social Workers (Councillor training background) | ≥ 5 years |
| 8 | Office Engineers (Civil, Architect, Electromechanical, etc.) | ≥ 7 years |
| 20 | Graduate engineers who were paired with more experienced staff. | graduate engineers |
| 1 | Program Deputy Director (Civil Engineer) | ≥ 15 years |
| 1 | Program Manager (International Expert). | |

Surveyor Teams were established, each one including two Site Engineers with a target of assessing 3 to 5 housing units each day. Every Site Supervisor was responsible for 3 surveyor teams

Each Chief Engineer had between 3 and 5 Site Supervisors reporting to them. This meant that they reviewed between 45 and 75 data collection sheets per day. Chief Engineers took a random sample of 5 data collection sheets from each Site Supervisor for review each day.

Finally the data was approved by the Programme Manager and Programme Deputy Director and handed to the banks.

## Payment

The intention was that once the payment phase of the programme had started, the owner of each property would conduct their own reconstruction. For this, they would be paid a cash grant in installments.

However, after one year, construction still could not take place due to the blockade on construction materials into Gaza by the Israeli authorities.

NOTE: One year later, the money pledged at the Sharm el-Sheikh conference for the reconstruction of the Gaza Strip had not been handed over to the Palestinian National Authority. There needed to be a political resolution between the two different governments in Palestine and an end to the siege by Israel before the donors would hand over the pledged money.

**A blockade on construction materials prevented houses from bein built.**
**Photo credits: CHF**

# U.4 / B.6 Haiti - 2008 - Flooding

## Case study: Distribution, cash and training

Full case study

**Disaster:**
Hurricanes and tropical storms

**Disaster date:**
1st September 2009.

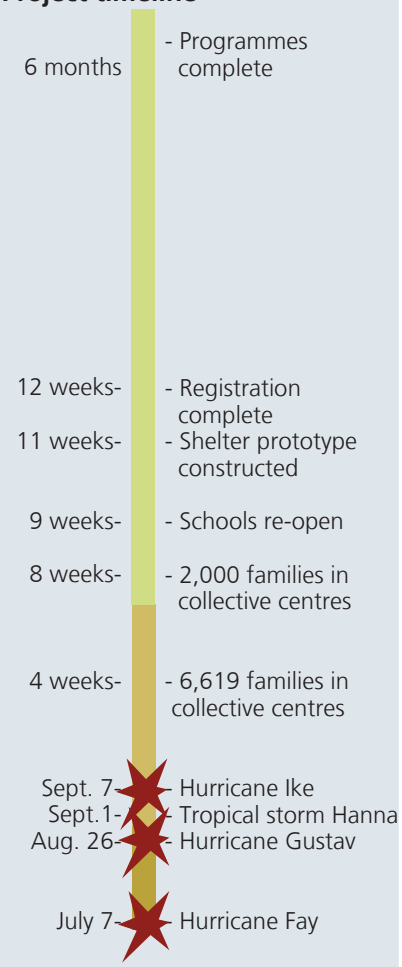
**No. of people displaced:**
165,337 families, half of the population of Gonaives were displaced.

**Project target population:**
Initially 60,000 people in collective centres. Later programmes targeted smaller numbers of those who had not returned.
1000 family cash distribution
1222 families in timber framed shelters (735 half kits, 487 full kits) and cash to cover transport.

**Shelter size:**
Cash was provided to support families to rent a room for six months.
Transitional shelter kits provided materials for an 18m² shelter.

**Occupancy rate**
Unknown


**Project timeline**




**Summary**
These shelter projects were in the complex urban environment of Gonaives, Haiti. Multiple approaches were used to support families living in collective centres and temporary sites to return. Initially programmes focussed on distributions of shelter items and toolkits. Later programmes diversified to include cash to support families that were renting, and shelter materials and support for those who had identified land.

**Strengths and weaknesses**

✓ Programmes were able to adapt over the course of the emergency, taking into account changing conditions and learning from previous programme successes and challenges.
✓ The programme ensured that families living in collective centres had options for return.
✓ Use of different sized transitional shelter kits allowed for support to be scaled according to needs.
✓ Cash for those who rented shelters allowed landless families to be supported by programme.
× By supporting families in collective centres and camps early on in the response, people were encouraged to remain displaced.
× Shelter tool kits were found to be of limited use for families who previously rented houses or whose houses remained buried.
× When distributions of return kits were made, it was not clear that those who received them would not qualify for future support in displacement locations. As a result, many families took the return kits but did not return.
- Despite prolonged negotiations, it was not possible to identify safe land on which to relocate those families whose houses remained at risk from future flooding.
- The funding environment was extremely limited for the response, limiting options and reducing the capacity of international organisations to provide support.
- As the result of challenges in beneficiary identification, the project was not able to support host families to provide much of the shelter. However there were separate food distributions, cash for work, clean up programmes and water and sanitation programmes in the host communities within Gonaives.

Damage in Gonaives
Photo: Joseph Ashmore

## Before the flooding

In 2004, the city of Gonaives was hit by tropical storm Jeanne. The ensuing flooding killed over 2,000 people.

By 2008, the city of Gonaïves, had an estimated population of 300,000 people.

## After the flooding

In 2008, hurricanes and tropical storms Fay, Gustav, Hanna and Ike lead to severe flooding. Eight percent of the Haitian population, were affected, 793 people were killed and crops were destroyed.

The town of Gonaives was most severely affected. 80 percent of the city was submerged under two metres of water. Although the death toll was lower, the damage was greater than in the floods of 2004. The receding flood waters left more than three million tons of mud.

Over half of the population of Gonaives were displaced, finding refuge with friends and family or in over 200 collective shelters using schools, churches and warehouses.

Major clean-up operations ran for many months. Many families were not able to return to their houses until the mud was cleared.

The response was significantly underfunded; the United Nations appeal reached only 40% of its target.

## First Return kits

In the first months after the flooding, relief items were distributed, with a focus on families living in collective centres.

The Government kit consisted of one foam mattress, one sleeping bag, one blanket, one hygiene kit, one jerry can.

The organisations involved agreed to distribute "return kits" which were intended to support families to repair their houses. These kits contained: one reinforced tarpaulin, five corrugated iron sheets, a tool kit with: one saw, a hammer, a shovel, a trowel, 1kg of nails and two polypropylene sleeping mats.

Unfortunately, a significant number of families who received return kits remained in the collective centres. The kits proved to be of limited success because:

- Many families did not own a house that they could repair
- The kits were distributed unconditionally so that families were able to receive them and remain in collective centres awaiting further relief distributions
- The kits were suited to timber frame construction. In the city many of the shelters were built with blocks or masonry.

## Collective centres

The need to restart schools and further pressure by the owners of the buildings that were being used as temporary accommodation lead to pressures to evict the affected families, but many had no other options. The closure of the first collective centre lead to the establishment of temporary sites with tents for shelter.

The implementing organisation supported the families on these tented sites by improving the site layout, and improving the drainage.

Finding a solution for those living with host families was a lower operational priority due to reduced risk of evictions, as well as significant challenges in identifying families.

As the programmes took place in an urban environment, identifying who actually lived where was challenging. Many families left a single family member in displacement sites to receive additional distributions. In some cases families had members in several sites.

## Registration

Two months after the disaster, a survey was conducted to gain a better understanding of what was preventing families from returning home. All of the major organisations operating in Gonaives took part in these surveys, and registered the families. Teams surveyed families in the collective centres between 3am and 4am to ensure that those surveyed were in fact resident in the shelters.

Once families were registered, additional families would not be added to lists and would not be able to receive support.

Exact address and mobile phone numbers of those in collective centres were collected and houses were visited one by one to assess damage. Houses were assessed as being either destroyed or damaged.

When it was not possible to verify property titles through paperwork, ownership of houses was verified by discussions with those in the neighbourhood.

The transparency of the process was a key part ofo it being accepted by the displaced families.

## Implementation

After the registration, just over 2000 families were found to be remaining in the collective centres and sites. For these families two approaches were adopted. Depending

Hotel used as a collective centre
Photo: Joseph Ashmore

upon their circumstances, families would either:

- receive cash for rental or
- support with transitional shelter materials and construction.

## Cash distribution

Approximately 1,000 families remaining in collective centres received cash, up to an agreed value. This value was equivalent to a one year rental of a room for a family. To qualify for this, families living in collective centres either:

- were tenants prior to the disaster, and hence did not want to repair a houses belonging to someone else, or
- were owners whose home was still flooded or coveredin mud or thy lived less than 10m from a main city canal.

The distribution was conducted in partnership with another international organisation who distributed to approximately half of the families, using identical distribution and verification systems. The process for cash distribution was:

- Once assessed, families had a maximum of four days to rent a room for one year. People did not have any problems in finding somewhere ot rent.
- The families would bring a signed a pre-agreement with landlord stating the rental rate. From this the maximum amount that the organisation would pay was agreed. The organisation would only pay rent up to an agreed maximum.
- The organisation would visit the house and verify with the landlord.
- The organisation would give agreed lists to the banks for the rental allowance to be paid direct to beneficiary.

## Transitional Shelters

Two types of repair or reconstruction kits were developed. These included materials to build an entire timber framed shelter (full reconstruction kit) or a reduced set of materials to repair damaged shelters (half / repair kit). These kits were combined with technical assistance, and some cash for transport.

1,222 families (54% of the targeted families) living in non-school temporary shelters and tent sites, received repair kits. Of these, 735 families received the smaller (half repair) kits and 487 received full reconstruction kits.

All kits were purchased by the organisation and distributed with the assistance of partner organisations in three different sites of the city. Some of the materials were distributed through vouchers that the families could redeem for agreed shops within an allotted timeframe.

Given the various constraints, including budget deadlines and limitations, it was decided that materials would be distributed in a one-off distribution rather than with a phased approach. This led to several families not building or competing shelters with the materials.

There were several cases such as vouchers and distribution cards being faked. The organisation noted that harder to copy vouchers would be required for future programmes. The short time periods in which they could be redeemed helped to reduce the risk of forgeries.

The distributions were conducted in conjunction with one partner organisation provided technical support. There was additionally follow up and monitoring of families who had moved.

## Closure

The programmes had proven very labour intensive, with multiple processes depending upon on previous processes. This did lead to delays but proved largely effective in offering families options away from collective centres.

Following the cash and materials distributions as well as public information, the numbers of people remaining in camps and collective centres was very small. Targeting the final families was then very easy.

As a result of the cash programme, rents did rise, but not excessively.

With the closure of collective centres, the organisation began a programme to rehabilitate them. This was followed by a nationwide assessment of building that could be used as collective centres in case of other disasters. Of these 40 were targeted for use as hurricane shelters. These buildings were repaired and upgraded to improve preparedness for future disasters.

## Materials list

A full repair kit given to each family, allowed for construction of a floor slab, a frame and a roof of approx. 18m$^2$. This was not enough for rendering the walls.

| Item | Qty |
|---|---|
| wood (roof) (1" x 3" x 16') | 10 |
| wood (frame) (2" x 4" x 12') | 4 |
| wood (roof) (1" x 4" x 12') | 6 |
| nails (3" 75mm x 3mm) | 0.5kg |
| nails (roofing) (3" 75mm x 3mm) | 0.5kg |
| cement | 4 bags |
| corrugated iron (1.8x0.9m) | 16 |
| I flat sheet for roof ridge | 1 |

Families are responsible for masonry and sand. If rocks are not available they needed 240 construction blocks (30x20x15 cm).

Tool kit to be shared between five families:

| Item | Qty |
|---|---|
| spades | 2 |
| wood saw (750mm) | 2 |
| claw hammer | 1 |
| bucket | 2 |
| roll of wire | 3 |
| tape measure | 1 |
| trowel | 2 |
| pick axe | 2 |
| pliers | 1 |
| sack | 1 |

**Prototype transitonal shelter**
**Photo: Joseph Ashmore**

# U.5 / A.10 Haiti – 2010 – Earthquake

## Overview:

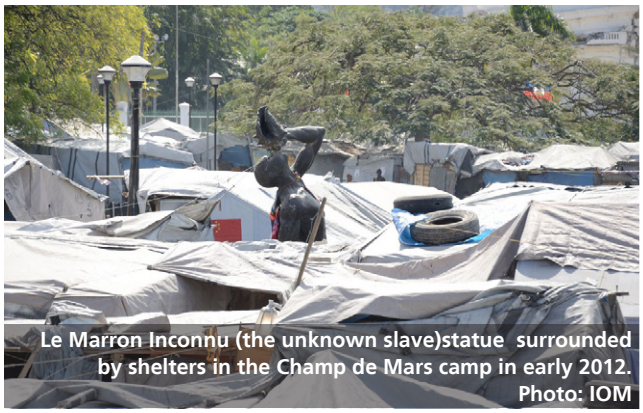
**Keywords:** Returns, Unplanned camps, Planned and managed camps, Urban neighbourhoods, T-shelter, Rental support, Housing repair and retrofitting, Cash / vouchers, Mass communications.

**Summary**

In October 2010, ten months after the Haitian earthquake, a humanitarian organisation began a project to close a small camp of around 200 families. Families were given rental support cash grants to cover the costs of renting accommodation for one year and to support the transition from camps to their new accommodation. The project succeeded in its aims and became a test case for a much wider programme of rental support.

Promoted by a small number of organisations, the rental support approach relied on donors' willingness to take a risk on a project-type with few precedents. By mid 2011, rental support cash grants had become a key part of the return strategy and by November 2012 over 23,000 households had received grants.

Early indications are that rental support cash grants have been successful. A survey of households that have completed their year of rental subsidy found that all of the respondents (90% of the total caseload) had been able to organise their own housing for the foreseeable future. None had returned to camps or moved to informal settlements.



Le Marron Inconnu (the unknown slave)statue surrounded by shelters in the Champ de Mars camp in early 2012. Photo: IOM

The statue in April 2012 after the Champ de Mars camp closure. Photo: IOM

## Background

The Haiti earthquake of January 2010 caused massive loss of life and damaged or destroyed 180,000 houses. (See Section A.4 *Shelter Projects 2010* for more background on the Haiti response)

Responses generally took one of three forms following the distribution of non-food items in the initial emergency phase:

- T-shelters: This was the main response by many organisations. Transitional shelters (T-shelters) were built using basic frames which could later be adapted into more permanent structures.
- Yellow House repair: Buildings were assessed by engineers and classified as Green (safe), Yellow (to be repaired) or Red (to be demolished).
- Permanent housing reconstruction: Rebuilding irreperably damaged houses.

The lack of buildable space in densely-populated urban areas and complex issues over land rights meant that the three main responses would only benefit those with land rights or those who owned houses.

Those displaced in camps overwhelmingly did not own either land or housing before the earthquake. Consequently, only a quarter of T-shelters built went to Haitians who were living in camps. Not only did this mean that camp populations were being reduced at a slow rate but it proved almost impossible to close camps completely. If only a small proportion of a camp had a durable solution available for them it wasn't long before the empty plots in the managed camps were taken by others moving in from spontaneous settlements.

Camps were not only bad for the displaced people but they also prevented occupied public spaces from being rehabilitated.

In this context some Haitian officials began suggesting that displaced people should be paid to leave camps. These proposals were dropped due to protection concerns as it would be impossible to verify if the families had found a durable solution. However, interest in properly planned rental support cash grants grew and presentations were made to donors to encourage adopting the approach.


**An edition of Chimen Lakay, a graphic newspaper, featuring the 16/6 program and a newly cleared market place. Designed by: Chevelin Pierre, Script: Mike Charles.**

## Neighbourhood approach

Rental support was closely combined with the neighbourhood approach to reconstruction.

The concept of the neighbourhood approach is that projects such as rubble clearance, rebuilding, water, sanitation and livelihoods programming should be joined together across sectors and that agencies create a coordinated and efficient response supporting families to move from camp to community. As of December 2012, this goal had not been fully realized, but efforts were being made to take a more holistic approach.

This approach minimises the possibility of families "rebounding" back into camps. For example, "rebounding" could be caused by a lack of employment opportunities or extremely poor sanitation standards in the neighbourhoods to which people return.

## The 16/6 program

The 16/6 program, led by the Haitian government, targeted income regeneration in sixteen neighbourhoods coupled with the closure of six camps.

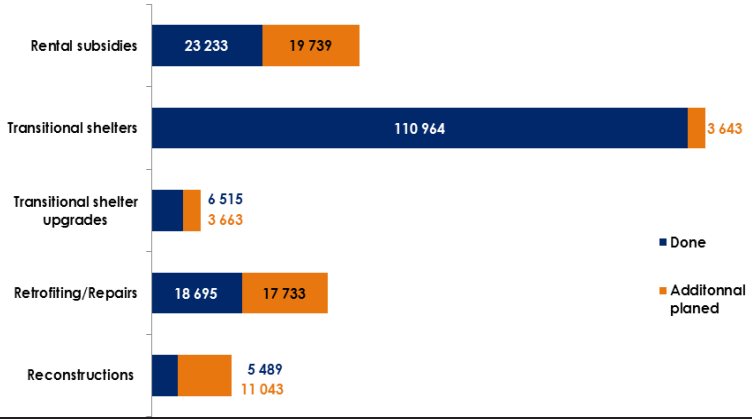
The programme focus on neighbourhoods meant that livelihoods grants were not allocated to families leaving the camps. Instead, a targeted livelihoods program was implemented, aimed at supporting neighbourhood businesses to start-up or expand in order to offer those returning real income generation opportunities. The grants were available to anyone with a business idea and not restricted to those returning from camps.

The 16/6 programme relied heavily on the use of rental support cash grants to offer all families living in camps a realistic housing option.

## Rental support

Rental support projects differed between agencies but largely followed the same pattern:

- **Registration**: Emphasis on obtaining accurate beneficiary lists through other health or distribution activities, in collaboration with Haitian authorities
- **Protection and assistance**: Identification of vulnerable families who qualify for additional help
- **Beneficiary communication**: Facilitation of informed choices by beneficiaries using wide range of multi-media and face-to-face communications
- **Choosing a housing option**: Either T-Shelter, Yellow-house repair or rental support cash grant
- **Choosing a rental property:** Family chooses a property (independently assessed for safety) and negotiates the rent
- **Cash grant transferred**: The year's rental cost of US$ 500 is transferred directly to the landlord and the family receives the money left over




**Graph to show completed and planned housing solutions, November 2012 Source : E-Shelter and CCCM Cluster**

- **Camp closure**: Families are given a US$ 25 cash grant to help in transporting their possessions to their new home
- **Surprise visit:** Agency awards a US$ 125 bonus to families continuing to live in their chosen rental accommodation following a surprise visit made a few months later.

In addition to the US$ 650 grant costs, the relocation of one household incurred an additional US$ 350 in programming costs, making a total cost of the return of one household rise to around US$ 1,000. Programming costs include beneficiary registration, communication of activities and protection activities such as providing two-years rental for vulnerable families.

In comparison, a T-shelter costs around US$ 2,000 and a permanent house around US$ 6,000.

## Concerns and safeguards

There have been vigorous discussions around the appropriateness of a rental support approach as a durable solution.

Some of the key concerns and corresponding safeguards were:

- **Cash distributions can act as a pull-factor to camps:** Announcements about rental support programs were made publicly only after accurate beneficiary lists were made. Negligible pull-factors were noted.
- **Rental properties may not meet minimum standards:** All rental properties were assessed for safety and sanitation issues. The emphasis was therefore on moving people out of the much worse conditions in camps.
- **Cash grants would inflate rents:** Rents were monitored by organisations using the prices agreed between families and landlords. Rents had not risen by the end of 2012.

The ruined National Palace surrounded by shelters before the Champ de Mars camp closure. Photo: IOM

The ruined National Palace after the Champ de Mars camp closure. Photo: IOM

## Indicators

The rental support approach shows the following early indicators of success:

- A survey of households who rented for one year achieved a 90 per cent response rate. Out of those households responding, all had found their own housing solutions and none had been forced to return to camps or informal settlements.
- Nearly 100 per cent of respondents reported that their situation is better or much better than it was in camps.
- 77 per cent of landlords used two-thirds of the rent money to improve the standards of the properties that they were renting out.

## Lessons

- Rental support could have been implemented earlier if it had been considered or picked up by other donors.
- Better links to livelihoods programmes could be made to further support families to continue to cover rental costs themselves in the future.
- The neighbourhood approach offers more chances for better coordination between sectors and organisaitons as well as between emergency and development actors.
- The approach has been popular with the general public, particularly as it emphasises beneficiaries' rights to actively choose where to live. Haitian politicians have been keen to promote and be involved in rental support programs.

# U.6 / A.14 Japan – 2011 – Earthquake and Tsunami

## Update:

**Keywords:** Urban neighbourhoods, Housing repair and retrofitting, Cash, Structural assessment.

**Country:**
Japan
**Project location:**
Ofunato, Iwate
**Disaster:**
Earthquake and Tsunami
**Disaster date:**
11th March, 2011
**Number of people displaced:**
390,000 houses total
5,500 houses in Ofunato
**Project outputs:**
150 houses repaired
Advice provided to 1,155 households
**Occupancy rate on handover:**
Unknown
**Shelter size:**
Variable
**Materials cost per shelter:**
Up to US$ 5,600


**Project timeline**


**Project description**

This project provided cash assistance to repair 150 houses after the tsunami in Japan. It was mainly targeted at families unable to apply for the government's Emergency Repair Aid and for those who required further assistance on top of the government's aid package. The project provided an information and support centre with outreach to support 1155 households. This service provided information to those who had difficulty in accessing other sources of information, primarily the elderly or people living alone.

**Strengths and weaknesses**

✓ The project hired architectural specialists to provide advice to rebuild durable housing.
✓ Affected people were supported to return to their original homes, and to reintegrate with their community.This helped to improve security in the area.
✓ Local construction firms used local labour and more environmentally sustainable resources.
✓ Houses of both evacuated and non-evacuated people were rebuilt.
✓ The project's focus on preserving parts of the old town helped to give a feeling of continuity to the community.
✓ By coordinating with other organisations, the project was part of a sustainable, sector-wide response. At the same time the affected people were thouroughly consulted to gather information and understand needs.
× By supporting rebuilding in potentially hazardous areas, there was the possibility that people could be re-exposed to future disasters.
× A limited number of households were supported as a result of the high cost per family (a result of Japanese materials prices and culture).
× The financial aid was only for repair and was not for the construction of new houses.
× Only families who had reached a certain stage in their recovery could benefit from the repair project.
- Vulnerable households were prioritized, including those made up of only elderly people or those with very low incomes.

Community consultation meeting . the organisation established an information centre and provided advice through individual consultations to 1,155 households.
Photo: Habitat for Humanity Japan

## Before the earthquake

Japan is a high income country with nearly 70 per cent of its population living in urban centres. The affected area was known for its deeply indented coastline, fishing and marine farming.

The population of the area was ageing and decreasing, while the percentages of detached houses and self-owned houses were high compared to urban areas.

## After the earthquake

The Great East Japan Earthquake was the biggest in Japan's recorded history. The earthquake caused a huge tsunami with a wave height of over 10m. It also caused a temporary rise in sea level of up to 40m.

The tsunami devastated the Pacific Coast of the Tohoku and Kanto area, cutting off communication routes. More than 390,000 houses were damaged or destroyed, and more than 400,000 people were displaced in the immediate aftermath.

The Fukushima Daiichi nuclear plant was also hit by the tsunami, causing a nuclear crisis that led to long-term evacuation for those living nearby.

The government built 54,000 temporary housing units. These were to last until safe permanent housing could be built. The government also released empty rooms from existing public housing and rented private houses and apartments for affected people.

The government provided grants of US$ 6,000 to families who were able to return home but lacked the financial resources to carry out repairs.

In Ofunato city the fishery business was devastated, and the up to 5,500 houses were damaged. The hilly landscape in Iwate prefecture, this resulted in many houses being damaged but not washed away, despite being flooded by the tsunami.

Despite the high levels of damage, not all home owners received grants through initial government schemes. This is because Iwate prefecture closed its application process earlier than other affected prefectures.

In Ofunato city, the government immediately constructed temporary housing for 1,800 households as an emergency measure. Later on, 150 unoccupied public housings and 500 unoccupied private apartments were rented by the government to serve as temporary housing.

Those that had not been evacuated often had difficulty rehabilitating their houses due to lacking resources.

## Selection of beneficiaries

Once the allocation of Emergency Repair Aid grants was completed it became clear that many families in Iwate prefecture and Ofunato city were still unable to repair their homes.

The organisation selected households based on financial need, the relative impacts that repairs would have on the family's quality of life and how much the total cost of repairs would be covered by available financial aid.

## Implementation

The organisation provided cash assistance for repairs to houses in Ofunato city. As households had to make applications to receive the financial aid, information about the project was advertised in different media and communicated through individual house visits to ensure that all residents were aware of the process.

The organisation approved 150 of 270 applications.

The works were done by local carpenters selected by beneficiaries themselves. This approach respected local Japanese culture and existing relationships in communities.

Each household signed a contract with the organisation, stating that the household and carpenter (rather than the organisation) had joint responsibility for the construction process. The organisation paid the repair fees directly to carpenters and monitored the construction.

The organisation made technical assessments before and after the construction, using local, qualified architects. These architects were specialised and qualified with relevant licenses for the works. Their titles would translate as "qualified architect of the first class", "qualified architect of repair technique".

The technical assessments were used to decide whether a house was safe to repair and to provide recommendations on how to improve the disaster resistance of the buildings.

## Advice

The organisation provided recovery advice to 1,155 households, including the 150 that received financial assistance. Advice was provided on housing, financial issues, house repairs and how to access government aid.

The project staff conducted the advisory sessions in the temporary housing complexes and local community centers. Staff explained the aid available for each individual case of damage.

In some cases external experts such as lawyers, architects and financial planners, accompanied project staff.

The staff provided the residents with information that they regularly gathered from the city offices and updates on various government assistance programmes.

The project tried to ensure that people who were less mobile, particularly elderly people living on their own, had equal access to information by making home visits.

The organisation hired two full -time staff to manage the project.

## Coordination

By coordinating with the city administration and NGOs, the correct up-to-date information was delivered to as many households as possible.

## DRR components

There was some concern that the tsunami-affected area would remain at high risk of future hazards and that encouraging people to repair their original homes was not reducing their exposure to future disasters.

The organisation tried to obtain specific hazard information on each location before they visited each house.

Before repairing a house the team checked whether it was in an area defined as a hazardous area in the city revival planin which case the building did not take place.

Before rehabilitation, architects reviewed each house to ensure their suitability for living.

Before and after photographs of housing repairs.
Photo: Habitat for Humanity Japan

## Logistics

Financial aid was directly paid to the builders and not to the homeowner. The payments were made by the organisation's headquarters in Tokyo to guarantee secure bank transactions. All of the construction firms that the organisation worked with had bank accounts.

The organisation checked in advance a list of appointed carpenters / builders from city offices. This was required to ensure that the organisation did not contribute to anti-social entities.







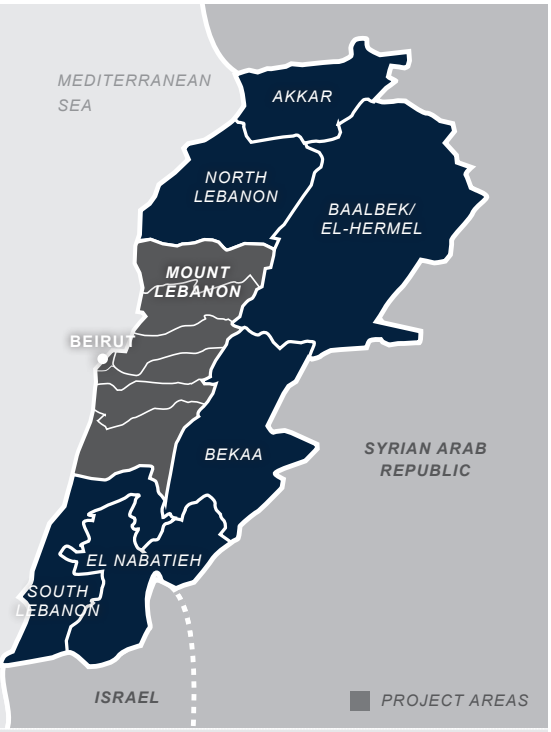
Before and after photographs of housing repairs.
Photo: Habitat for Humanity Japan

CASE STUDY

# LEBANON 2015-2016 / REFUGEE CRISIS

**KEYWORDS:** Urban, Housing repair / retrofitting, Cash / vouchers, Advocacy / Legal, Training, Guidelines / Mass communications, Community participation

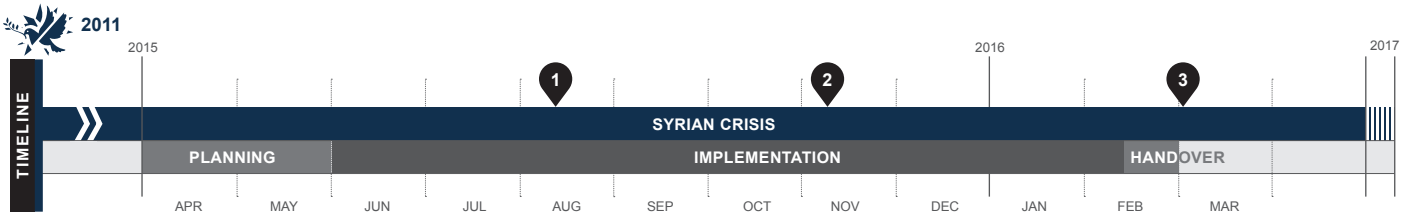
| | |
|---|---|
| **CRISIS** | **Syrian Refugee crisis in Lebanon, 2011-ongoing** |
| **TOTAL PEOPLE AFFECTED** | **1.04 million Syrian refugees in Lebanon** (Source: Syria Humanitarian Needs Overview 2017) |
| **PROJECT LOCATIONS** | **Beirut and Mount Lebanon governorates** |
| **BENEFICIARIES** | **706 households** (3,751 individuals) assisted with shelter repairs (Including Lebanese and Syrian families, with a minority of Palestinian and other minorities).<br>**2,745 households** attended hygiene promotion sessions (Lebanese, Syrian and Palestinian households).<br>**35,700 individuals** attended HLP awareness sessions. |
| **PROJECT OUTPUTS** | **499 shelter upgrades**<br>**207 shelter rehabilitations**<br>Other outputs: **25** Focal Points and Committee Members trained; Establishment of a roster of **14** skilled workers; **1,222** man-days of construction activities. |




| | |
|---|---|
| **MATERIALS COST PER HOUSEHOLD** | **Upgrades: USD 636 - Rehabilitations: USD 1570**. As per sector standards, upgrades are minor works up to USD 700 and rehabilitations are major works up to USD 1,500. |
| **PROJECT COST PER HOUSEHOLD** | **USD 1,731** on average. |

## PROJECT SUMMARY

The organization used a holistic, neighbourhood, approach across delineated zones in dense urban areas. Shelter rehabilitations and upgrades were provided to 207 and 499 households respectively, along with improvements to water and sanitation facilities. Campaigns on hygiene promotion and housing, land and property rights were also conducted. Community-wide projects were implemented to improve service delivery, such as water and solid waste management.




1 Aug 2015: **Neighbourhood-level social and shelter mapping, establishment of focal point networks and committees, and capacity-building.**

2 Nov 2015: **Beneficiary-led voucher-based emergency shelter and WASH upgrades to substandard shelters completed.**

3 Mar 2016: **Rehabilitation of occupied shelters units completed.**

### STRENGTHS

+ Enhanced local technical skills and sense of ownership.
+ Raised awareness about HLP rights and obligations, and improved landlord-tenant relationships.
+ Served as a platform for information sharing between community members and municipalities.

### WEAKNESSES

- Strategy had to be adapted due to a lack of empty units available.
- Information flow and community participation could have been improved.
- Recruitment of staff/labour from within the community, quality control and flexibility in specifications could have been stronger.


*The majority of refugees in Lebanon stayed in rented accommodation. High housing demand, combined with the high cost of living, led to many people living in substandard and overcrowded conditions.*

## CONTEXT

*For more background information on the situation and shelter response in Lebanon, see overview A.29 in SP 2015-2016.*

Lebanon suffered from structural inefficiencies even prior to the Syrian conflict. **In 2015, an estimated 87.7% of the population was urban[1],** and there was a significant heterogeneity between rural, urban and peri-urban areas, in terms of institutional service delivery and governance[2]. This was further exacerbated by the conflict in Lebanon (lasting over two decades) and the political fractionalization that brought the country to a standstill.

The influx of Syrian refugees into such context dramatically deteriorated the living conditions for both refugees and host populations. The crisis increased population density in Lebanon from 400 to 520 persons per km$^2$, especially in urban areas, leading to urban congestion, competition over housing, increasing pressures on existing resources and tensions between host populations and refugees[3]. This situation was particularly constrained in Beirut and Mount Lebanon, with only a limited number of informal settlements in the area. Most refugees in Beirut and Mount Lebanon (92%) resided in rented apartments or houses, although the comparatively high cost of living meant that **many refugee families were only able to afford substandard or overcrowded accommodation.** An assessment by the organization in the target areas showed that 23% of households in Beirut and 59% in Mount Lebanon lacked basic facilities and were in need of urgent rehabilitations.

## PROJECT GOAL AND TEAM STRUCTURE

The objective of this project was to provide immediate community-driven WASH and Shelter support to the most vulnerable Syrian populations and their host communities in Beirut and Mount Lebanon.

The organization had been registered in the country since 2006 and had an established country office in Beirut, as well as a field office in Akkar, with established links with local authorities and civil society stakeholders. The team for this project included one project manager, two team leaders, nine field staff and four technical staff, in addition to support staff.

[1] CIA World Factbook, [Accessed 6 August 2015].
[2] Lebanon: Promoting Poverty Reduction and Shared Prosperity, World Bank, June 2015.
[3] Lebanon Crisis Response Plan, 2016, pp. 16.

## LOCATIONS AND BENEFICIARY SELECTION

Firstly, target communities were identified based on 1) refugee concentration; 2) socio-economic vulnerability; 3) access to basic services; 4) willingness of local stakeholders to host refugees and collaborate; and 5) interventions by humanitarian actors. This selection was informed by Key Informant Interviews and inter-agency rankings. Based on the knowledge of the target areas, the organization provisionally identified clusters from which target communities were selected.

Secondly, the priority in target neighbourhoods was to **gain a thorough understanding of local community dynamics,** including mapping key stakeholders from relevant demographic groups (Syrian and Lebanese), inter-community dynamics and current WASH and shelter conditions. This included an overview of main shelter types, the state of landlord-tenant relationships, and any issues which could impact the prioritization and implementation of shelter activities. In order to do this, a social-mapping process was conducted, which involved semi-structured interviews and focus-group discussions with immediately identifiable local key informants, including municipal authorities and local NGOs or community-based organizations. Within target areas, vulnerable households were targeted irrespective of shelter type or nationality.

## COMMUNITY PARTICIPATION

The neighbourhood approach used to implement this project relied on beneficiary involvement in the development and delivery of all activities, at both the community and household levels. Following the mapping of local stakeholders and identification of community representatives, consultations were held to review the proposed selection criteria (for household-level assistance) and identify key challenges of the target communities, to be addressed through small-scale emergency projects. Following consultations, the organization established a network of community focal points, committed to improving their neighbourhoods. These assisted in identifying shelter units in need of rehabilitation, and in liaising with landlords.


*Many refugees in Lebanon settled in unfinished buildings, often in urban areas.*

## PROJECT IMPLEMENTATION

The project initially focused on the rehabilitation or upgrading of empty shelters within the targeted community, to have alternative housing options for families facing eviction. However, due to a number of contextual challenges, **the organization shifted to a beneficiary-led model of rehabilitation or upgrading of their own properties.** Through this, beneficiaries received the main inputs with a voucher scheme, and were paid for fittings and installation on cash-per-task basis. Apart from providing livelihood opportunities to some beneficiaries, this modality also helped the organization to overcome the issue of having limited access to the sites.

Agreements were signed with local suppliers for material procurement, and vouchers provided to each family in one instalment. The value was based on a bill of quantities that covered the repairs specific to each household. The beneficiaries redeemed their vouchers through one purchase and were given ownership over their own installations. In addition, the organization closely monitored the distribution of materials, to ensure high quality.

In order to support vulnerable populations without formal rental contracts, landlords and tenants were asked to sign a lease agreement in order to participate in the project. **The organization also provided sessions on hygiene promotion and legal advice on Housing, Land and Property (HLP) issues** through this intervention. This included training for local committee members, as well as campaigns in targeted neighbourhoods. Participants of these campaigns received information on how to obtain a lease agreement, obligations of each party and how to avoid legal trouble. This included advice on handing over of the rented premises, guaranteeing against hidden defects upon move-out and against eviction following end of lease, and advice on conducting major repairs and maintenance, to avoid unexpected costs upon lease termination.

## COORDINATION

In addition to conducting coordination through the Sector Working Group meetings in Beirut, the organization liaised with local NGOs conducting other shelter projects by sharing beneficiary lists to avoid overlaps, as well as by referring cases between agencies to avoid gaps in coverage. The organization also liaised with NGOs conducting other protection and WASH projects in the target area, to share ideas on the neighbourhood approach used and, in some cases, other INGOs attended the organization's forums to learn more about this approach.

## MATERIAL PROCUREMENT

The organization conducted detailed market assessments and selected local suppliers for materials to be procured locally. This reduced operational costs and increased support for the local businesses, thereby contributing to the area's economic development, and reduced tensions with host communities over limited resources and jobs.

For larger rehabilitations, the organization signed contracts that included material specifications and prices with local contractors. Sourcing the materials from within the neighbourhood or district was key to reduce transportation costs and contribute to the local economy. Moreover, it was important to rely on materials that were accessible and affordable to all beneficiaries. Finally, cash was provided for transport in cases where a large volume of materials had to be shipped to the beneficiary's house.

## MAIN CHALLENGES

***SECURITY ISSUES IN ACCESSING CERTAIN AREAS***. Such risks imposed restrictions on the selection of target communities. The rapidly evolving security context in Lebanon required the organization to increase engagement with neighbourhood focal points and local municipalities. Daily monitoring of shelter activities also contributed to stronger relationships with beneficiaries. However, in many other vulnerable areas where other INGOs faced difficulties for gaining access (due to socio-political issues), the organization was able to successfully implement the project, through its engagement with local authorities.

***LOW QUALITY MATERIALS***. Due to complaints of low quality materials being used for rehabilitations and upgrades, the organization instituted a new process, in which a follow-up agreement was signed with the supplier, specifically on material quality. In some cases, low quality items were replaced, in order to address beneficiaries' complaints. The quality of materials was continuously assessed by the project engineers during the distributions. In any event where materials were considered substandard, they were returned and the distribution was delayed.

***MANAGING BENEFICIARIES' EXPECTATIONS***. Some complaints on the quality were also due to high expectations that were unrealistic, given the project budget. To avoid this challenge, the organization ensured that each household received complete information on the quality of work that would be provided. Agreements were signed with one local supplier per target area, which beneficiaries could select to complete the works if they desired. Beneficiaries were informed of their ability to register complaints at fora and via the organization's local hotline, and these were followed up by the project engineer after implementation.

***LAND OWNERSHIP ISSUES AND INSECURE TENURE AGREEMENTS.*** Some of the targeted households had no proof of ownership, which is a widespread issue, given the complex context in Lebanon. Close collaboration with the municipality was needed for verifications of ownership. Additionally, very often only verbal agreements existed between landlord and tenants, without any rental contract. This was tackled through prolonged negotiations between both parties, to clarify the terms of the housing arrangement and to sign a lease agreement.

## WIDER IMPACTS OF THE PROJECT

At the community level, the project provided a catalyst for change, combined with continued community engagement and capacity-building activities, to highlight needs such as HLP, protection, hygiene promotion, conflict resolution, participatory planning and community-based solutions. The project also helped to identify engagement opportunities for better responses in the future. For example, the committee in one of the neighbourhoods was able to solve a ten-year problem related to solid waste management, by relying on the initiative of the community and planning opportunities that were generated during this project.

## STRENGTHS, WEAKNESSES AND LESSONS LEARNED


*The project made basic upgrades, but it became challenging to find enough buildings in the targeted communities.*

### *STRENGTHS*

**+ The cash-for-task concept** allowed beneficiaries to contribute in their own communities and enhanced their technical skills. While all supplies were made available before the works, cash was given following the completion of activities.

**+ The project improved the organization's visibility and credibility.** Community engagement activities, conducted throughout the course of the project, led to a widespread acceptance of the organization for future interventions.

**+ HLP considerations and significant improvement in tenant-landlord relationships,** as both parties became more aware of their rights and responsibilities.

**+ Served as a platform for information sharing** between the community members and the municipalities, and responded to the urgent needs of both parties.


*Bathrooms were also repaired and upgraded under the project.*

### *WEAKNESSES*

**- The organization could not identify sufficient empty shelters in the target communities** to be rehabilitated and, for the small number identified, landlords refused to sign rental agreements (binding them to keep the shelters empty until potential evictions occurred). Given such a context, the organization modified its strategy, and capacitated the focal points to rapidly respond to evictions, by providing housing to beneficiaries in alternative houses within the same neighbourhood, as well as conducting emergency referrals to other agencies working in the areas, until a more permanent housing solution could be identified.

**- Community engagement could have been improved**. Better information flow and participation of affected communities in the identification of activities and target areas, as well as in the discussion of gaps and challenges, could have ensured a more tailored and effective assistance.

**- Recruitment** of staff/labour from within the communities (by the organization and contractors), **quality control** of materials, **stricter procedures** in signing changes in BoQs and **flexibility in specifications** could have been stronger.

### *LEARNINGS*

- **Stimulating local livelihoods.** The beneficiary-led approach was largely successful in stimulating the local economy and empowering beneficiaries in implementing their own rehabilitations. The final assessment found that the target of 490 man-days of labour was greatly surpassed, with 1,222 man-days created through these works.
- **The organization was aware that not all target households would have sufficient technical skills** to conduct such upgrades. As a result, the team identified skilled workers from the neighbourhoods, and households were able to utilize these workers to complete their upgrades. In addition, 30% of beneficiaries were found to have conducted further home improvements at their own expense.
- **Maintaining community ties and livelihoods.** One of the key learnings from previous programming was that geographically spread-out shelter works, especially for empty shelters, created a problem for evicted beneficiaries by forcing them to move to a new neighbourhood, severing ties with their communities and threatening their livelihoods. The neighbourhood approach was specifically designed to overcome this.

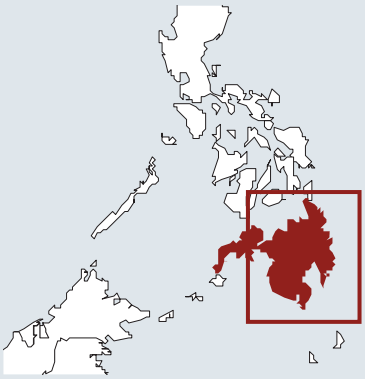
# U.8 / A.25 Philippines – 2011 – Cyclone

## Overview:


### Summary

In late 2011, over 39,000 houses were damaged and over 400,000 people were displaced by winds, floods and landslides following tropical storm Washi (also known as Sendong). Collective centres were established and non-food items were distributed in the first phase of the response.

After the emergency phase of response, transitional sites were established and programming shifted to include reconstruction on newly identified relocation sites (see A.27 in SP 2011-2012), transitional shelter programming in existing urban areas (see A.26 in SP 2011-2012), and repair and rehabilitation of damaged houses. After one year, 7,800 people remained in 38 different evacuation centres.

### Background

The Philippines is a middle-income country, with a well-educated population and engaged local and national authorities. The Philippines regularly faces natural disasters and the country has had previous experience of coordination with the cluster system. This helped to manage the response efficiently.

Many low income families had settled in particularly vulnerable locations on river banks and other marginal land. In large parts of Mindanao there had not been any major disasters in recent memory.

In rural areas, families commonly lived in *amakan* type shelters (with woven bamboo walls) with frames made from bamboo and other varieties of wood.

For urban areas, people living at or below poverty line, lived in a mixture of raggedly constructed shanties and semi-concrete houses.

### After the cyclone

Tropical storm Washi, (also known as Sendong), hit the Mindanao region of the Philippines from the 16th to the 18th of December 2011. The storm brought strong winds and heavy rain that led to flash floods, landslides and protracted flooding. 624,600 people were affected, 430,000 people were displaced and 39,000 houses were damaged or destroyed. The primary impacts were in Cagayan de Oro City and Iligan City.

In the immediate aftermath of the storm, people found shelter in evacuation centres, with host families, in rented accommodation, in makeshift shelters at the site of destroyed houses or in damaged houses.

The government immediately mounted a major emergency rescue, evacuation and response operation. Coordination was rapidly established in northern Mindanao by the Office of Civil Defence. It worked closely with international organisations, and established co-ordination groups for shelter, camp management coordination and for non-food items.

Approximately three quarters of those people affected by the storm lived at or below the poverty line with limited means for self-recovery. Of the partially damaged houses, nearly half had no structural damage but needed to be cleaned before families could move back in.

Two months after the storm, moderate to heavy rains fell over parts of Mindanao and Visayas islands, triggering some flooding and landslides. Although no flooding was reported in the areas affected by the tropical storm, the rain worsened the conditions in temporary shelters.

**Before the cyclone, many families were living in locations that were vulnerable to storms and flooding, but that had access to livelihoods. The government declared that some of these were "no build" zones, and new sites had to be identified. Photo: Wan Sophonpanich**

Heavy rain caused over 400,000 people to be displaced. Most people made temporary repairs to their houses or moved in with host families. Photos: Anna Pont

## Evacuation centres

A total of 119 evacuation centres were established, housing 100,000 people (20,000 families). Initial response mainly focussed on meeting the needs of people in these often crowded evacuation centres. Camp management committees were established in many of the sites.

By the end of 2012 many evacuation centres had closed, leaving 7,800 people (1,700 families) in 38 evacuation centres.

## Tented camps

Some tented camps were established to decongest some of the most overcrowded evacuation centres, and to provide shelter for people living in evacuation centres which needed to be returned to their previous use (such as schools).

## Transitional sites and Relocation sites

Where temporarily available land could be found, transitional sites were established as a more durable solution to camps (See A.26).

When land for construction could be negotiated on a long term basis, relocation sites were established (See A.27). After four months, seven relocation projects were underway, with a planned capacity of nearly 6,000 houses for households whose land was unsafe.

By the end of 2012, nine permanent relocation sites had been established by the local government working with NGOs. 3,147 shelters were complete, 2,943 of which were handed over. 359 more permanent shelters were being built.

## Host families

Despite the early focus of relief activities on collective centres and the comparative ease of delivering large scale assistance to these centralised sites, the majority of the affected population found accommodation with host families. After 2 months, 260,000 people were living with host families. The main support that these families received was through emergency distribution.

## Recovery

An interagency shelter assessment based on secondary data sources was conducted within the first month of the storm, but took some time to be finally published. It provided numbers of damaged and destroyed houses that were used as planning figures.

Following these results, the shelter organisations collectively agreed to prioritise support to the most vulnerable 65 per cent of people whose houses had been lost or damaged:

- families/occupants of the 13,850 structurally damaged houses who were at or below the poverty line
- families from all the 11,427 totally destroyed houses.

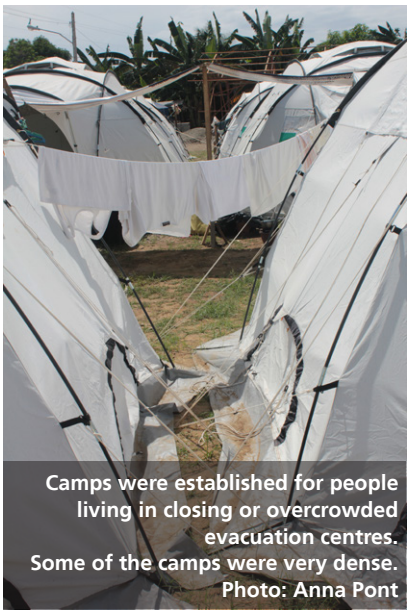
The government established a reconstruction policy that included:

- the establishment of no build zones
- permanent housing
- material supplies
- site upgrading for informal settler families
- housing loans for families in formal settlement sites.

In practice, the only no-build zones that were officially declared were in Isla de Oro and Cala-cala. These highly damaged settlements were directly in the path of the river. No official declaration was made regarding other high risk and medium risk areas.

## Land

One of the major constraints in the provision of temporary and permanent shelter was the lack of available land. Identifying land and preparing transitional and permanent relocation sites took many months.



Camps were established for people living in closing or overcrowded evacuation centres. Some of the camps were very dense. Photo: Anna Pont

Some transitional sites were established as more durable solutions than camps. Photo: Anna Pont

# U.9 / A.28 Somalia – 2011 – Famine / Conflict

## Update:

**Keywords:** Urban neighbourhoods, Household NFIs, Construction materials, Transitional shelter, Site planning, Infrastructure, Coordination.

**Country:**
Somalia

**Project location:**
Mogadishu

**Conflict / disaster:**
July 2011 Famine and Continuing conflict

**Number of people displaced:**
200,000 IDPs in Mogadishu

**Project target population:**
Approximately 36,000

**Project outputs:**
3,645 housing units complete WASH and health facilities

**Occupancy rate on handover:**
100 per cent - November 2012

**Shelter size:**
15.8m² (3.6m x 4.4m)

**Materials cost per household:**
US$ 420


**Project timeline**


**Project description**

The Tri-Cluster project is a coordinated group of 16 projects implemented by 14 partners across the sectors of shelter, WASH and health. Zona K in Magadishu was chosen as the target area as it had the densest concentration of IDPs and was the least likely IDP settlement to be evicted once Mogadishu stabilised and developed. The project goal was to improve the protection for displaced people living in Zona K through improved settlement planning and the provision of integrated services from multiple sectors.

**Strengths and weaknesses**

✓ Regular coordination meetings achieved a common understanding of aims and objectives amongst all partners.

✓ By integrating services the project was able to act more efficiently to provide shelter, access to water and sanitation and basic health serives.

✓ Settlement planning has enabled organisations to have better access and the beneficiaries have an enhanced sense of community. Displaced people were involved in the development of context-specific planning standards which helped manage expectations.

× Underestimation of the impact of other projects funded through other sources active in the same project area.

× Although eviction is unlikely in the short-term, there is no clear ownership of land and so displaced people are vulnerable to the Somali 'gatekeepers'.

× A weak community structure combined with the fact that many people were already settled within the settlement meant that it was not always possible to follow site plans and meet minimum standards.

× Communal spaces have been eroded by an increase in the numbers of people living in Zona K.

- As the sectors work at different levels (shelter with households, WASH with groups of five families per latrine and health with the whole community) synchronising activities required complex work plans.
- Mapping all the stakeholders in the process was difficult, and their influence changed over time.
- The project had a high profile, putting implementing partners under pressure to produce results quickly, compromising planning and construction quality.
- The Tri-Cluster coordinator took on many of the camp management and camp coordindation duties.

**An urban area of Mogadishu was re-planned and many organisations worked together working in three sectors of intervention. These shelters have been upgraded by inhabitants who have built their own external shaded and cooking areas.**
**Photo: Richard Evans**

## Before the displacement

Mogadishu has hosted displaced people from conflicts since 1991. However, as drought worsened in late 2010 and famine approached in early 2011, more and more Somalis were driven away from rural areas to Mogadishu looking for assistance and safety.

Displacement was compounded by the ongoing conflict in Somalia.

## After the displacement

Upon arrival in Mogadishu, the Internally Displaced Persons (IDPs) settled on any unoccupied land. This process of self-settlement meant that there was no site planning. Services such as water and sanitation, and access to the 100 or so settlements were sporadic. As the number of sites closer to the centre of town reduced and as Al-Shabaab's influence lessened, many IDPs settled into the area which became known as Zona K.

Zona K's mixed ownership, between the government, the university and some private individuals, meant that it was one of the least likely sites to be evicted. By the end of 2012, the site covered an area of over 3km$^2$ with an estimated 70,000 IDPs living in make-shift shelters called *buuls* (traditional Somali thatched shelter). These were constructed by the IDPs themselves from scavenged materials and items received from humanitarian organisations.

Any attempt to coordinate settlements in Mogadishu would have directly interfered with the economic relationship between the host population and the IDPs. As a result, no formal camp coordination mechanism was established.

As a response to the influx of IDPs into Mogadishu, a three-phase strategy was developed in July 2011:

- Provide all displaced people with a non-food item packages
- Provide transitional shelter solutions
- Provide site planning to improve living conditions and access to other basic services such as WASH and health.

The shelter coordination did not advocate the creation of new settlements for the IDPs. This strategy was attempted in Puntland (see A.8 in *Shelter Projects 2008*) but was not very successful. Instead, the Cluster advocated that organisations should provide humanitarian assistance to the locations where IDPs had self-settled. This has been the approach in Somaliland and Puntland where the conditions and access are more favourable.

The mechanics that control the creation of new camps were deemed too complex and unpredictable to encourage new sites.

## Implementation

Under the umbrella of the Tri-Cluster there were five shelter projects, with a total value of US$ 4 million.

The first project focused on mapping the existing settlement, producing settlement plans, and creating access roads and storm drainage.

This mapping was followed by consultations with the beneficiary community and landowners to ensure that people would not be evicted once work was completed.

One organisation chose to work through long-standing partner organisations while the other contracted the work to local construction companies.

Where possible the implementing organisations followed the site plans, but they were often forced to deviate from them. Reasons for this included the need to accommodate new demands from stakeholders, the construction of new permanent structures that had been built after the initial mapping, and the need to accommodate a larger population.

Once the shelters were completed, two local organisations provided non-food items, including blankets, kitchen sets, jerrycans and fuel-efficient stoves. Beneficiary lists were provided by the main shelter partners,and distributions were undertaken once the shelters were handed over.

## Selection of beneficiaries

The whole area was sub-divided into 25 zones, and settlement planning was based on the displaced population at the time of mapping. The two main organisations started in different zones and completed all the construction before moving on to the next. Every IDP that was registered received a shelter and non-food item kits. The other Tri-Cluster partners provided sanitation and water points in the locations identified during the planning process.

## Coordination

Effective coordination was crucial for success, as there were 16 projects operating in a very concentrated area. In addition, there were many actors who were already working in Zona K. Therefore, a dedicated Tri-Cluster coordinator was brought in to act as a focal point for the 16 projects.

Initially there was reluctance from some of the implementing partners to work under the same umbrella. The WASH and health partners did not want to wait for the mapping process to be completed, and wanted to implement projects immediately, regardless of the output from the planning phase.

Over a series of meetings, the importance of coordinating activities was emphasised and a plan was developed where some activities could be carried out at the same time as the mapping.

The project integrated shelter WASH, health and site planning. Photo: Richard Evans

Coordination and communication was needed with the local authorities ensured that they were aware of the project and its implications, and that they approved the temporary development plans. As the final shelter solution was semi-permanent (5 to 10 year lifespan), the urban planning undertaken as part of the Tri-Cluster, will influence the development of this part of the city. Access roads created now, will be the main roads for years to come.

## Technical solutions

The shelter actors worked with the main partners to identify a unified shelter typology. Initially, US$ 80 shelter kits were planned as the land tenure was not known. Later, a 'hybrid' between plastic sheeting and corrugated galvanised iron (CGI) was adopted during the planning stage. This provided a better quality shelter while also keeping a light footprint. The design was developed further just before the construction phase into a full corrugated iron model, partly due to donors and partly due to protection concerns.

## Future

The Tri-Cluster project was expanded for 2013 to include education and protection focused projects. It was planned for an additional shelter agency to join the existing two partners, and 3,000-4,000 more shelters were planned.

Once the framework and common understanding on coordination was created, it became feasible to add additional sectors and projects.

The Tri-Cluster approach came about because the Humanitarian Coordinator considered that shelter, WASH and health were the most pressing needs for the IDPs. At the time there was surprise that other sectors were not also included in a multi-sectorial approach. However, the coordination of just three sectors was difficult enough, and in retrospect the presence of additional partners and targets may have reduced the effectiveness of the entire intervention.

Generally, once an organisation secured funding, the focus was immediately on implementing as quickly as possible in order to meet project targets. To combat this "tunnel vision" amongst organisations, the successful multi-agency approach invested heavily in communication and consultation. This always takes time.

Starting with just 3 sectors enabled a culture of coordination to be ingrained. Only once the coordination was working with a few key partners was it possible to expand to the full array of humanitarian services.

Site planning for the urban areas of Mogadishu. Different potential plans were shared with focal groups. In the end, row planning was chosen because people could understand it better and could clearly mark the extent of their 'land'. This would make it easier for people to know what belonged to them and help to avoid conflicts.

## Important Notes

1. **Proposed New plots for Shelter:** Community mobilization for Demarcation of plots 5.1m x 6.9m per Household prior the Implementation of shelter.
2. **Proposed Communal Latrines:** The shown (newly proposed) **communal latrines** (**L**) are a preliminary design. Latrines are combined with wash rooms and separated by gender. Septic tank oriented to access road.The WASH Cluster will define a unified **final** design.
3. **Measurements:** Distances are indicated from from **shelter wall** to center line of an existing road /access path.
4. **New Water Points:** Technical implementation planning to be done by implementing WASH agencies and in line with overall Tri-Cluster Water Infrastructure plan for zone K.
5. **Spatial Reserves** for social services and communal space (**CS**) around open spaces, existing schools, creation of new open space etc.
6. **New Health care facility spaces** (**H**) are additional spatial reserves along main access roads.

| Sector 3.2 | |
|---|---|
| Planning Population: | 1248 |
| No. of Shelter: | 192 |
| No. of Latrine: | 11 (block unit of 3) |
| No. of Water Point: | 2 (6 taps unit) |
| No. of Garbage Point: | 1 |
| Area of Health Center: | 240 m2 |
| Area of School Space: | 0 m2 |
| Area of Open Space: | 630 m2 |
| Area of Communal Space: | 290 m2 |

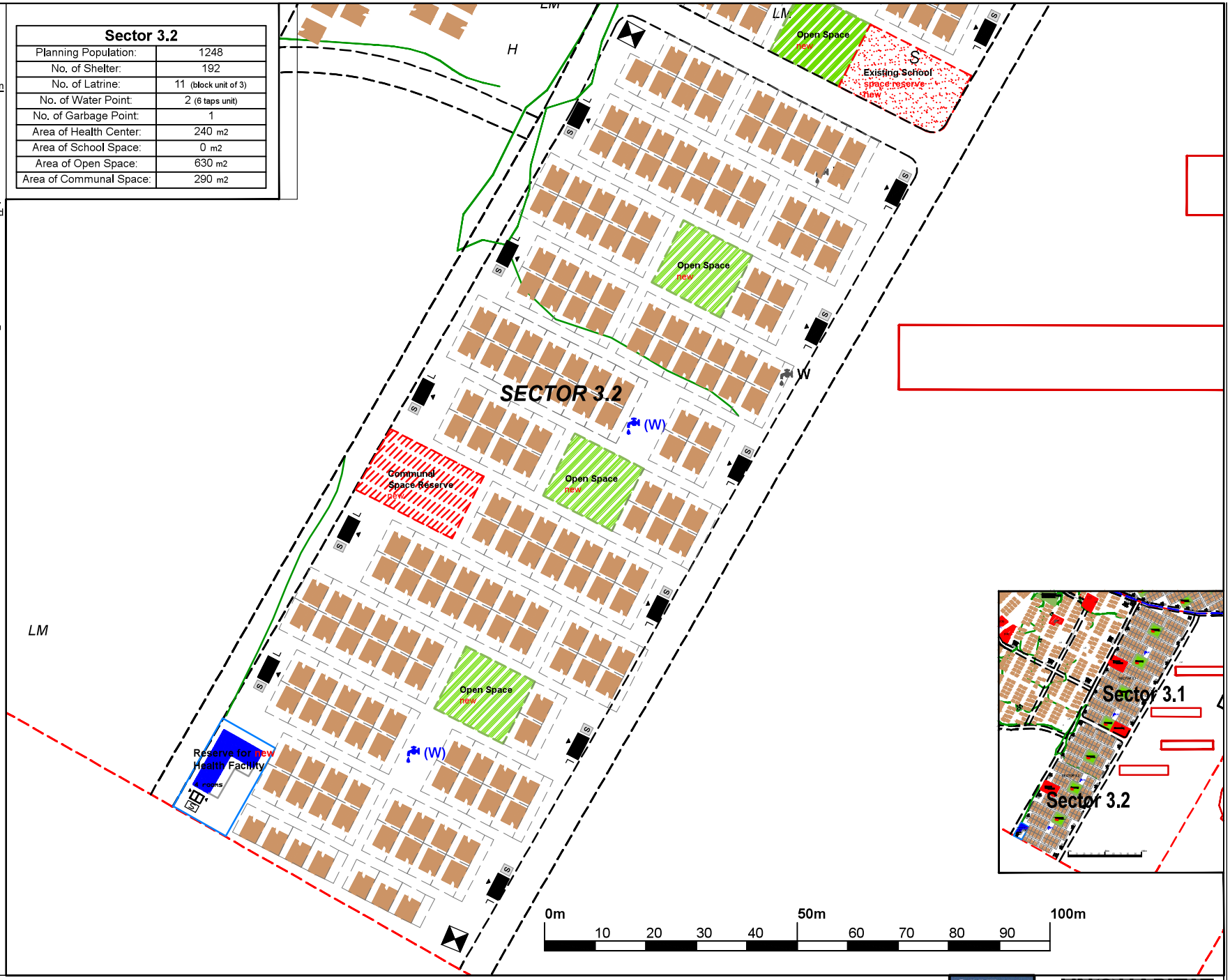
## Legend

**Existing structures & facilities:**
*Based on GPS survey Aug/Sep 2012*

- Water Point / Water Point non-func. (TS = Tap Stand)
- Water Tank / Water Tank non-func.
- Water Borehole
- School
- Health Facility
- CGI structures
- Trees / Bushes

**Proposed New Shelter and Facilities:**

- Shelter new 4,4m x 3,6m (Design by NRC / DRC)
- Block of 3 Latrines & 1 Shower new (Design by WASH Cluster)
- Water Point (6 taps) new
- Reserve for Garbage Collection 4m x 4m (Container or Enclosed Collection Point)
- Reserve for Health Post
- Reserve for commercial use (min.10m x 6m with distances)
- Reserve for IDP school (min.10m x 6m with distances)
- Reserve for multi-purpose use (community consultation: community center/ kitchen /mosque /police post i.e.)
- Open Spaces new (playgrounds, sports field i.e)







Plan Title

# Site Plan Sector 3.2

*Sector areas and numbering only for purpose of coordination. No official naming. Plan is based on satellite imagery from 2. May 2012 and site mapping from Aug 2012*

Project: Mogadishu IDP settlement mapping, planning and physical improvement (access roads and water drainages)

Component: IDP SETTLEMENT PLANNING

Project under: Tri-Cluster Mogadishu Response

Funded by: CHF SOMALIA

In cooperation with: Shelter Cluster

UN HABITAT

Plan Nr. MOG-07 Paper Size A1 Date 08.01.2013

# U.10 / A.30 Thailand – 2011 – Bangkok Floods

## Overview:

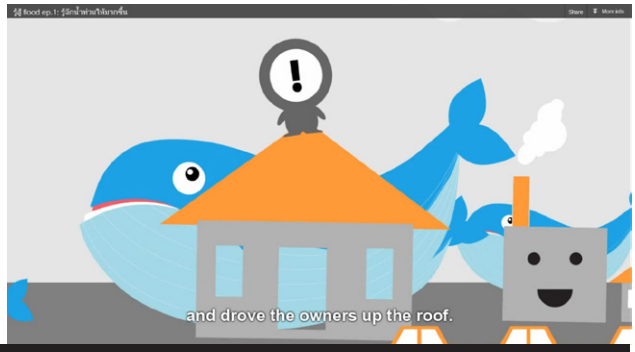
**Keywords:** Non-displaced, Collective centres, Hosting, Urban neighbourhoods, Guidelines and training materials, mass communications.

**Summary**

During the 2011 floods in Thailand, social media became a crucial tool for information-sharing and decision-making, both for those affected by the floods and for agencies responding to needs.

The use of social media presents challenges in terms of filtering useful information from misinformation, the reliability and accountability of those distributing message, and identifying communication channels and strategies which will reach specific target groups. Some people may not use social media at all.

*This overview draws particularly on two publications: "The role of Twitter during a natural disaster: Case study of 2011 Thai Flood," in Technology Management for Emerging Technologies (PICMET) and "Flooding in Thailand: flee, fight or float", Forced Migration Review No. 41, by Wan Sophonpanich.*


**This animated video explained the floods, and whether people should stay or evacuate, using whales to help explain the volume of flood waters. It has received over one million internet hits. Images: Roo Su Flood**

### Background

A combination of a heavy rainy season and tropical storms caused the worst flooding Thailand had seen for fifty years. Over five per cent of the country's land was under water by November 2011 and the flooding had affected 13 million people and caused 813 deaths.

A novel way of thinking about the volume of water that had accumulated and needed to be dispersed was presented by the animation group *Roo Su Flood* (Know, Fight, Flood).

The billions of litres of water was calculated to be the equivalent of 50 million blue whales, and Roo Su Flood made a popular online animation which explained the impact of the floods in terms of these millions of whales slowly trying to make their way out of the country and into the Gulf of Thailand.

(www.youtube.com/roosuflood)

### Response options

As the floods slowly moved towards Bangkok and its surrounding areas, people began to make contingency plans.

Despite the scale of the floods and the number of people affected, the capacity of the Thai authorities, national NGOs, community groups and individuals to deal with problems meant that international organisations played a relatively small role in the response.

Flooding does not automatically lead to displacement. In fact, Thailand's traditional building designs historically coped with floods by allowing water to flow through the bottom floor of a house while the family retreated upstairs to wait for the water to disperse.

However, in many urban areas of Thailand the traditional cultural capacity to mitigate the effects of flooding has been lost. Those caught up by the flooding can be categorised into the following groups:

- **Precautionary displaced**: People sealed-up their houses and garages and moved away from risk areas until the water levels dropped.
- **Emergency displaced**: People forced to move to collective centres or friends once the flood swamped their homes.
- **Stayed with simple precautions**: People living in areas where flooding is more frequent were able to withstand flood heights of two to three metres, with minimal assistance needed to replace their temporarily lost livelihoods.
- **Stayed with advanced precautions**: People with considerable resources built flood-defence walls,

Livelihoods were most affected for those who chose to relocate. For most people, daily life continued despite the flood waters.
Photo: Thanchanitch Suttichote/IOM Thailand

sandbagged entrances, installed water pumps or bought motorboats. People in this group often helped out in their neighbourhoods.

- **Stayed with high level of need**: People who chose not to move but lacked the ability to cope with the consequences of the flood and relied on external assistance.

People who relocated sometimes found that they had under-estimated the impact of the floods and were forced to stay away much longer than they initially planned. This had knock-on effects for their livelihoods.

Some of those moving to collective centres were displaced for a second time when the centres themselves flooded.

## Information flood

Information was available from a huge number of different sources: the private sector, print and online media, the government, NGOs and informal social media.

The founder of the animation group that produced the Roo Su Flood series, explained how the animations were a response to the difficulty in picking out useful information from misinformation.

Information was not only being communicated by a multitude of different actors but was also competing for attention.

In some cases, for example, politicians offered different advice and assessments with political point-scoring in mind.

**"We are not only being flooded by floodwaters, but also by information."**

## Reliable information?

Twitter usage in Thailand soared by 20 per cent between September and October 2011. A research paper published in 2012 analysed the most prolific tweeters and most re-tweeted tweets.

The study showed that the content of tweets with the hashtag '#thaiflood' overwhelmingly concerned situational announcements and alerts (39 per cent). Support announcements made up ten per cent, requests for assistance accounted for eight per cent of tweets and requests for information five per cent. 37 per cent of tweets were categorised as "other". The study found that the majority of the situational and location-based information was tweeted by members of local communities.

To identify which Twitter users were seen as providing reliable information the study looked at the number of retweets users received. Those retweeted the most were not necessarily those who tweeted the most or had the most followers.

Those with the most retweets included:

- Thaiflood / kapookdotcom: These accounts tweeted information from the private sector site thaiflood.com. Thaiflood.com became a major source of information, with an active community and facebook page, and also collaborated with Google's Thailand Floods Crisis Response site.
- SiamArsa: An account belonging to one of the largest volunteer groups. It used Twitter and Facebook to share information about flooding and volunteer work.
- GCC_1111: The account belonging to the official government website for the Flood Relief Operation Center (http://floodthailand.net) which also facilitated the posting of assistance requests.

## Lessons to learn

Using and monitoring social media is an important part of disaster response in today's world. An active analysis of the data can help prioritise communication channels and displacement patterns, while coordinated messaging can reduce panic and misinformation.

Some people moved to evacuation centres, where emergency support was available, often from volunteer group. However the majority of people decided to stay.
Photo: Thanchanitch Suttichote/IOM Thailand

The two reports in the summary note the following learnings:

- **Verification**: It was not always possible for people or agencies to easily identify misinformation.
- **Accountability**: Those actors giving advice did not always consider how they might be accountable for the messages they sent out.
- **Rights and responsibilities**: Knowledge and understanding of humanitarian principles and codes of good conduct was often overlooked.
- **Simplicity**: The popularity of Roo Su Flood demonstrated that there was an appetite for easily understandable messages communicated in novel ways.
- **Context and target audience**: The audience for the messages should be made clear. For example, providing information on how to seal up a door may be technically correct for low-level flooding but inappropriate and dangerous in high-risk areas.

Of course, not all the electronic information is available to everyone, and communities with little or no access to the internet not only had less access to information, but were also less able to vocalise their needs.

This is particularly true of highly-excluded groups, such as migrant workers. The migrant workers not only had less access to electronic information due to langues issues, but may also have had less access to the support available to Thais. There were reports migrants were denied access to some collective centres and relief items.

Collective centre in a university.
Photo: Thanchanitch Suttichote/IOM Thailand

Most people decided to stay in their houses with various levels of precautions against the flood waters. Some vulnerable people did not relocate and did not have access to the electronic information, and required special assistance.
Photo: Wan Sophanpanich

Global Shelter Cluster
ShelterCluster.org
Coordinating Humanitarian Shelter

# The Global Shelter Cluster
## Coordinating Humanitarian Shelter


© Kathy Mueller/IFRC, Pakistan 2009

**The Global Shelter Cluster (GSC) is an Inter-Agency Standing Committee (IASC)[1] coordination mechanism that supports people affected by natural disasters and internally displaced people in conflicts with the means to live in safe, dignified and appropriate shelter. The GSC enables better coordination among all shelter actors, including local and national governments, so that the people who need shelter assistance get help faster and receive the right kind of support.**

### Scope of the Global Shelter Cluster

People who have lost their homes try to meet their shelter needs as quickly as possible. Disaster and conflict-affected households use different types of material, technical, financial and social assistance to ensure access to appropriate shelter. This "sheltering" process goes beyond the immediate provision of basic shelter solutions and is closely linked to longer-term recovery and reconstruction, as well as with other measures to assist individuals, families and communities to re-establish themselves and resume an ordinary life.

The GSC's scope includes all activities related to achieving the right to adequate housing with a humanitarian focus.
This includes:

- emergency and longer term shelter support
- shelter-related non-food-items (NFIs)
- housing construction and reconstruction
- settlement support such as site planning and urban planning
- shelter preparedness and risk reduction.

### Global and local coordination support

To support the shelter preparedness, relief and recovery process, the Cluster operates on two levels:

- At the *global level,* the GSC strengthens system-wide preparedness and increases technical capacity to respond to humanitarian emergencies through improved coordination, and support for country-level shelter clusters.

*[1] The Inter-Agency Standing Committee (IASC) is the primary mechanism for inter-agency coordination of humanitarian assistance. It is a unique forum involving the key humanitarian partners, including UN agencies, the IFRC, the ICRC, IOM, and the main international NGO consortia.*

- At the *country level,* Shelter Coordination Teams ensure a predictable, effective response by mobilizing groups of agencies, non-government organizations, local and national governments, and the International Red Cross and Red Crescent Movement to respond in a strategic and accountable manner.

## The Cluster Approach

**As part of the Humanitarian Reform Process, the members of the Inter-Agency Standing Committee agreed in 2005 to designate global cluster lead organizations as coordinators for all the main sectors of humanitarian response. Organizations that have accepted this responsibility include UN agencies, the International Organization for Migration (IOM), the International Federation of Red Cross and Red Crescent Societies (IFRC) and Save the Children.**

**The Cluster Approach aims to improve the effectiveness of humanitarian response through greater predictability, accountability, and coordination of humanitarian response, following natural disasters or for internally displaced people in emergencies caused by conflict. It seeks to ensure that the humanitarian community becomes more structured, accountable and professional, and can better partner with local authorities and other humanitarian actors. The Cluster Approach is not used in refugee situations, since the United Nations High Commissioner for Refugees (UNHCR) is mandated to coordinate assistance for refugees.**

**The Shelter Cluster is one of eleven sectoral clusters. For more information please see *www.humanitarianresponse.info***

## Shelter is more than tents

The various needs of affected households for safety, privacy, protection and livelihood activities must be addressed through approaches that are appropriate to the specific context and the availability of resources. Rather than simply providing pre-determined shelter products or stand-alone solutions such as tents or pre-fabricated shelters, humanitarian actors use a variety of methods to provide support to the affected people. These include the provision of basic shelter materials, technical support, cash-based assistance, awareness-raising and promotion of safe shelter and settlement practices, rental support, or a combination of these and other approaches. Some of these methods involve construction, but many others do not. The GSC supports these different approaches, which build upon and support local solutions.

*Plastic tarpaulins and tents are frequently the first kind of emergency shelter assistance the Cluster coordinates. © Truls Brekke/NRC; Democratic Republic of the Congo 2008*

- *The Global Shelter Cluster* collects, analyses, discusses and shares best practice and lessons learned worldwide, to ensure that men, women and children affected by conflicts and natural disasters get the best possible assistance.

- *The Global Shelter Cluster* recognizes and supports the contributions made by national shelter stakeholders, such as governmental authorities, local organizations and the affected households themselves, to achieve durable shelter and settlement solutions.

- *The Global Shelter Cluster* acknowledges the need to ensure a comprehensive and integrated response and the essential role of shelter to support protection and early recovery. Thus, the Global Shelter Cluster works closely with the United Nations Office for the Coordination of Humanitarian Affairs and other global clusters to ensure inter-cluster coordination, in particular with Water, Sanitation and Hygiene Promotion, Camp Coordination and Camp Management, Education, Early Recovery, and Protection.

# NOTES

This booklet is a compilation of case studies of humanitarian shelter responses in urban environments, compiled across the six past editions of the interagency publication *Shelter Projects*.

The projects described in the case studies and overviews contained in this booklet represent responses to conflict, natural disasters and complex crises, implemented by national and international organizations, as well as host governments, and demonstrating some of the implementation and response options available.

The publication is intended to support learning by highlighting the strengths, weaknesses and some of the lessons that can be learned from different projects, which try to maximize emergency funds to safeguard the health, security and dignity of affected people, whilst – wherever possible – supporting longer-term shelter needs and sustainable recovery.

The target audience is humanitarian managers and shelter programme staff from local, national and international organizations at all levels of experience. *Shelter Projects* is also a useful resource for advocacy purposes, showcasing the work done by the sector, as well as for research and capacity-building activities.

All case studies and overviews contained in this booklet, as well as from all editions of *Shelter Projects*, can be found online at:

www.shelterprojects.org

**Global Shelter Cluster**
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