SHELTER PROJECTS

CENTRAL AND WEST AFRICA:
16 Case Studies

CASE STUDIES OF HUMANITARIAN SHELTER AND SETTLEMENT RELEVANT TO CENTRAL AND WEST AFRICA

Global Shelter Cluster
ShelterCluster.org
Coordinating Humanitarian Shelter
Shelter Projects - Central and West Africa: 16 Case Studies

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

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**INTRODUCTION**

This booklet is a compilation of case studies of humanitarian shelter responses relevant to the Central and West Africa regions, compiled from the seven 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 400 shelter practitioners from across the world, from over 50 organizations and over 80 countries, including host governments’ shelter responses.

The projects described in the case studies and overviews contained in this booklet represent responses to disasters, conflict and complex crises, demonstrating some of the implementation and response options available within the Central and West African contexts. The case studies discuss topics such as NFI distributions (e.g. n. 11, 14), NFI voucher fairs (n. 9), communal shelters (e.g. n. 3), support for returnees (e.g. n. 5, 13), host family support (e.g. n. 10), cash grants (e.g. n.11, 13), site planning (e.g. n.15), HLP support (e.g. n.16) and technical assistance (e.g. n. 11, 14).

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](http://www.shelterprojects.org)
CASE STUDY

BENIN 2010-2011 / FLOODS

KEYWORDS: Emergency shelter, Host family support, Cash assistance, NFI distribution, Gender mainstreaming, GBV prevention and risk mitigation

<table>
<thead>
<tr>
<th>CRISIS</th>
<th>Benin Floods, September 2010.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL HOUSES DAMAGED</td>
<td>55,000</td>
</tr>
<tr>
<td>TOTAL PEOPLE AFFECTED</td>
<td>680,000 people.</td>
</tr>
<tr>
<td>PROJECT LOCATIONS</td>
<td>Benin, six communes: Aguégué, Dangbo, Adjohoun, Bonou (Ouémé department), Zanganando and Ouinhi (Zou department).</td>
</tr>
<tr>
<td>BENEFICIARIES</td>
<td>5,072 households.</td>
</tr>
<tr>
<td>PROJECT OUTPUTS</td>
<td>5,072 Emergency shelter kits distributed. 31 Demonstration shelters built.</td>
</tr>
<tr>
<td>SHELTER DENSITY</td>
<td>3.5m² per person (Average household size is 5).</td>
</tr>
<tr>
<td>MATERIALS COST</td>
<td>USD 83 (Average per household + USD 30 cash distribution in parallel).</td>
</tr>
<tr>
<td>PROJECT COST</td>
<td>USD 90 per household (including organizational overheads).</td>
</tr>
</tbody>
</table>

PROJECT SUMMARY

This project assisted over 5,000 flood-affected households in two phases, with a specific focus on reducing vulnerabilities of women and girls. In the emergency phase, shelter repair kits were distributed to support returns and host families, along with unconditional cash grants. The longer-term recovery phase involved a range of multisectoral interventions to support returnees to rebuild their villages, including cash for work, technical training on Build Back Safer, and dissemination of key messages on land tenure, WASH activities and awareness of Gender-Based Violence (GBV) issues.

STRENGTHS

+ Assistance focused on self-recovery to avoid aid dependency.
+ Kits were designed to best suit the local context.
+ GBV assessment was undertaken.
+ Complaints mechanism was used to report cases of GBV.
+ Training on GBV awareness for community mobilizers and provision of referrals to service providers.
+ Shelter activities were complemented by WASH activities.

WEAKNESSES

- The response team did not include gender or GBV technical experts and field teams did not include gender officers.
- The beneficiary selection process delayed the operation.
- Lack of Housing, Land and Property knowledge.
- Lack of background information on cultural norms, gender relations and understanding of gender issues.
- Poor consultation and participation of village committees.

Flood waters damaged housing, land and other properties, and caused displacement of affected people to temporary sites and host families settings.

www.shelterprojects.org
CONTEXT

Many villages in Benin regularly face flooding due to the rise of the Niger River, especially in areas where low-income housing structural vulnerability is very high. Homes are traditionally built with mud and wood, using designs and materials that have low resistance to water.

Nearly half of the population of Benin is under the age of 15, and major challenges are to be addressed in the improvement of the legal and political status of women in the country. Polygamy is a common practice, implicating around 35% of households in the flood-affected area.

Gender-based violence (GBV) is a widespread and deeply rooted problem in Benin, and can be exacerbated during times of crisis. According to a survey conducted by the Benin Ministry of Family and National Solidarity in 2009, up to 70% of women and girls in Benin have experienced some form of GBV. The most common forms of GBV in Benin include intimate-partner violence, forced and early marriage, rape and sexual harassment.

SITUATION AFTER THE DISASTER

Although there is regular annual flooding, the floods of September 2010 were the worst since 1963. They destroyed an estimated 55,000 houses and affected 680,000 people (8% of the population). Housing damage was largely caused by standing water, not the first impact. Most of the existing housing materials were not carried away by the flood.

Many people were forced to leave their homes to find shelter in collective centres or with host families, either outside of their villages or in non-affected areas. Three self-settled camps were also formed, where families built make-shift shelters.

GBV RISKS

As part of planning for the recovery phase, an assessment of the initial emergency distributions was carried out, to inform the long-term programming objectives. The results revealed a relationship between GBV risks and the vulnerable shelter conditions of the displaced populations.

Los of resources and livelihoods (especially women’s) and the lack of safe and dignified living conditions heightened the vulnerability of affected populations and GBV risks. Other GBV risks were reported, linked to the incidences of excessive alcohol consumption, inter-family tensions, lack of safe spaces for girls and overcrowding. In addition, women in the camps reported an increase in intimate-partner violence and marital rape. Additionally, there was a general lack of knowledge about where survivors of GBV could go if they were abused, especially in more remote communities. Fear, shame, social stigma and distance to services also prevented survivors from seeking help and reporting cases of violence.

AREAS AND BENEFICIARY SELECTION

The project targeted flood-affected populations displaced in collective centres, host families, and self-settled or planned camps. The areas of intervention were selected because of their high level of vulnerability, existing relationships with the communities and the on-going work of local partners. The initial lists of eligible beneficiaries were submitted to the village committee (composed of the chief of village, elders and women groups) for revision, correction and validation.

Priority was given to households which had suffered the greatest housing damage and had the least access to food, with particular attention to: pregnant and lactating women; the elderly; female-headed households; children under five years old; and people living with disabilities.

Technical criteria were also used to target those people who had lost their houses and had little resources to repair or rebuild them. The families in collective centres were initially targeted with cash, due to the unsuitability of these buildings to provide safe shelter and to allow the school year to recommence. For families whose houses were located in flood risk zones, supporting reconstruction was not immediately possible, therefore there were many people in collective centres who did not want to leave.

EMERGENCY PROJECT IMPLEMENTATION

The emergency assistance phase, implemented with local partners, lasted for six months. Households were provided with unconditional cash support (through a local Micro Finance
The programme distributed kits during set dates, and people were responsible to transport the materials home.

Institution) and distributions of shelter repair kits (building materials and NFIs). The kits were adapted to best suit the repair and reconstruction needs of each of the three main housing typologies (houses built on riverbanks, in valley regions and in the highlands), and responded to two central priorities:

• To support return and to repair and rebuild their damaged or destroyed homes;
• To help ease the burden of hosting families by supporting displaced families to construct a temporary shelter on the land of the host family.

The unconditional cash grants of USD 30 were intended to support people in leaving their emergency shelter and returning home where possible, and were subdivided in two tranches. The grant was given to the woman in the household who was seen as best placed to spend the money to meet basic needs of the family. Although not implicitly given for shelter support, the cash meant it was easier for families to restart their lives and the family. Although not implicitly given for shelter support, the cash meant it was easier for families to restart their lives and could be spent on shelter materials, if this was a priority.

The shelter project was part of an integrated approach that included education, water, sanitation and hygiene activities. Hygiene promotion was provided though a Child-to-Child system in schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobilization activities around schools and 20,473 households (95% of the affected) received WASH kits. There were also social mobi...
The project reviewed the risks of long-term dependency caused by providing emergency support to planned and self-settled camps, and re-oriented its assistance towards self-recovery solutions.

The shelter repair kits were designed to best suit the local context, according to the three major traditional housing types to be reinforced or repaired with slightly different toolkits or materials.

A GBV assessment was undertaken at the end of the emergency phase, allowing the project to better address GBV risks in the rehabilitation phase and ensure better preparedness and risk mitigation.

The complaints mechanism in place was used to report cases of GBV (for domestic disputes related to cash distribution). The project included the training of community mobilizers to promote awareness of GBV at community level, and provided referrals to service providers.

Shelter activities were complemented by WASH activities at household and community level.

1 Contents of the three repair kits can be found in the shelter strategy, available at http://bit.ly/2hA0Bv6.

<table>
<thead>
<tr>
<th>Types of kits</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency shelter repair kit type 1</td>
<td>USD 64</td>
</tr>
<tr>
<td>Riverbanks house (on stilts)</td>
<td></td>
</tr>
<tr>
<td>Emergency shelter repair kit type 2</td>
<td>USD 87</td>
</tr>
<tr>
<td>Valley house (rammed earth slab)</td>
<td></td>
</tr>
<tr>
<td>Emergency shelter repair kit type 3</td>
<td>USD 99</td>
</tr>
<tr>
<td>Highlands house (monolithic adobe walls)</td>
<td></td>
</tr>
</tbody>
</table>

LEARNINGS

- Context analysis must go beyond sex and age disaggregated data and look at existing gender dynamics in a society. For instance, polygamy in Benin communities is a common occurrence, yet it was not taken into account in relation to the quantities of NFIs and amounts of the cash grants. Both cash and shelter kit distributions were eventually adapted, so that the support reached all members of the family, including the second wives with their children, who were then considered as independent households with equal needs.

- An analysis and mapping of services available to GBV survivors in flood-prone areas (e.g., medical, psychosocial, legal, security, shelter) from the pre-planning phase would have been beneficial.

- Increased knowledge and capacity of staff on HLP issues. During the recovery phase, it was highlighted that the Shelter support staff should have taken into consideration the concerns of the community around the location of their homes, especially for those that needed to relocate out of the risk areas.

- More collaboration and support to existing community-organized women’s groups would have created opportunities for women’s inclusion in the shelter programme and better integration of survivor support.

- Gender and GBV mainstreaming should have been integrated from the planning stage, and orientation sessions for staff should have been accounted for as part of this response and delivered by GBV/gender specialists, due to the high probability for field staff to witness cases of GBV, while performing door-to-door shelter monitoring.

- Consideration on who should receive the grant in the household, how decisions on expenditures are made based on the existing gender dynamics, and identification of issues that create or exacerbate tensions and GBV risks should be conducted, before implementing cash-based programmes. It should not be assumed that men cannot make good decisions regarding the needs of the household, and both men and women should be engaged equally in consultations.

The Emergency Response Team did not include gender or GBV technical experts during the programme planning and implementation.

Field teams did not include gender officers to ensure GBV prevention throughout all stages of the emergency shelter response.

The beneficiary selection process took longer than expected, delaying the operation.

- Lack of Housing, Land and Property (HLP) knowledge. Field staff did not have the background knowledge, awareness or socio-cultural sensitivity to properly advocate and give programmatic support to communities and village councils on HLP issues (relating to flood risk zones and displacement).

- Lack of background information on cultural norms, gender relations and understanding of gender issues in the emergency context, and how the crisis had affected those dynamics.

- Consultation and participation of village committees could have been stronger (including the traditional and religious leaders and the women’s groups).
Case Study: **Keywords:** Planned and managed camps, Construction materials, Emergency shelter, Transitional shelter / T-shelter, vouchers, Site planning.

**Country:** Burkina Faso

**Project location:** Férério Refugee Camp, Oudalan Province

**Conflict:** Malian Refugee Crisis

**Conflict date:** March 2012

**Number of people displaced:**
July 2012 (increased later in 2012):
IDPs in Mali: 150,000
Refugees - Burkina Faso: 100,000

**Project target population:**
Férério Refugee Camp:
3,000 households May 2012
4,000 households August 2012

**Project outputs:**
1,000 shelters

**Occupancy rate on handover:**
100 per cent

**Shelter size:**
21 m²

**Materials cost per shelter:**
US$ 240

**Project cost per shelter:**
Unknown

**Project timeline**
- Project start

**Project description**
This project provided temporary shelters for nomadic Tuareg refugees displaced from northern Mali to the Oudalan Province in Burkina Faso. Shelters were built through a self-help construction approach using traditional construction materials. Participation in the selection of the type of shelter to be provided was crucial since the refugees had already rejected other proposed solutions by other agencies. The project worked within the cultural norms of a Tuareg population where women were the main constructors of tents, and families moved their shelters according to nomadic traditions to increase spacing between shelters and tribal groups.

**Strengths and weaknesses**
- Beneficiaries felt involved in the process right from the first discussion around shelter design.
- The project was implemented through existing community structures which facilitated beneficiary selection as well as shelter materials distribution.
- Close involvement of the beneficiary communities guaranteed the security of both project staff and stored materials.
- The host government representatives on site were part of the coordination process.
- Staging the distribution of materials worked as an incentive to complete the shelters.

- Coordination with some other agencies could have been strengthened. Despite the change in site layout in terms of spacing between the shelters the providers of sanitation services did not change their layout, leading to many latrines being either too far away or too close to other groups.
- Coordination was hampered by the lack of a camp management focal point.
- Site selection, though beyond the influence of this project, made accessing populations difficult as communication connections were poor.
- Site planning at Férério camp had to adapt to the cultural norms and social structures of the camp population. A traditional grid layout was inappropriate and was rejected by the refugees who preferred to group their shelters according to tribal affiliations and space them in a way that reflected their usual, nomadic way of living.
### Before the conflict
The Tuareg population in northern Mali is made up of nomadic and semi-nomadic groups moving across sparsely populated desert areas. Traditional Tuareg tent shelters are made from wooden supports covered with tanned animal-skin roofs, and are designed to be easily dismantled.

The semi-nomadic population construct mud brick houses with traditional tents erected close by. Although land is mainly owned by men, the Tuareg tent is built by women and is the property of the family matriarch.

Mali is one of the poorest countries in the world, with a life expectancy of just over 50 years and a Human Development Index ranked 175 (out of 187).

### After the conflict
A large number of the Tuareg population of northern Mali sought safety in neighbouring countries. The Tuareg population targeted by this project moved mainly to the Sahel region of Burkina Faso but were asked by the Burkinabe government to move to managed camp sites.

By March 2012, Férério camp contained over 2,000 households. Four months later, in July, the figure had risen to 3,500.

Initially other organisations provided all-weather tents, but people refused to occupy them. Emergency tents were seen as too flimsy to protect people from strong winds and high temperatures.

This project was established to involve beneficiaries in the development of a shelter solution.

### Beneficiary selection
The organisation received an assessment report from another shelter actor that concluded that 1,000 shelters were needed. These shelters were to fill gaps in support as some shelter solutions had already been provided.

Initially an agency proposed a shelter design based on a standard box-style shelter with a gable roof to be arranged in a grid format, fairly close together. Some shelters were built by an external contractor.

Both the design and the site plan were rejected by the refugees and this agency was invited to provide an alternative solution, securing extra funds to meet any additional needs.

Three criteria for selection were shared with the beneficiary groups, the United Nations and the government representative in the camp:
- households with a lack of adequate shelter
- households with elderly occupants
- vulnerable female-headed households who have no access to adequate shelter.

The community groups were organised by the refugees themselves and were based on traditional tribal structures. Leaders of these groups drew up a draft list of potential beneficiaries. This was used as the basis for an assessment by the agency in coordination with camp community leaders and the host government representative.

The final beneficiary list was presented to the group leaders, who communicated the outcome to the other families.

### Implementation
Participation in all stages of the project was crucial so a sample shelter was built following discussions with community groups about the design. The sample shelter was then a focal point for suggested modifications before the final materials list was established.

The organisation procured the materials. Triple-weave plastic sheeting was procured (though not produced) in Burkina Faso and the quality was seen as better than plastic sheeting that had previously been distributed in the camp.

To prevent damage to the local environment by cutting down trees, wooden poles were procured from sustainable Eucalyptus plantations in the Southern regions of Burkina Faso.

All materials were first transported by truck to a hub three-and-a-half hours’ drive from the camp and then to the camp itself.

The beneficiary communities were given responsibility for guarding the wood stored in an open-air, fenced-off area, while desirable items like plastic sheeting and mats were distributed immediately to reduce the risk of theft.

Each household was given a materials coupon. Structural materials were distributed first and, when the structure was completed, materials for covering the roof and walls were distributed.

Distribution was coordinated with the tribe leader who organised the order in which families would fetch their materials. The whole community of each tribe assisted in moving the materials to the construction site.

### Project description

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
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<tr>
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<td>This project was established</td>
</tr>
<tr>
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<td>Beneficiary list was presented to the group leaders</td>
</tr>
<tr>
<td>March 2012</td>
<td>Participation in all stages of the project was crucial</td>
</tr>
<tr>
<td>July 2012</td>
<td>The organisation procured the materials</td>
</tr>
<tr>
<td>March 2012</td>
<td>The organisation received an assessment report</td>
</tr>
<tr>
<td>July 2012</td>
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<tr>
<td>March 2012</td>
<td>Three criteria for selection were shared</td>
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</tr>
</tbody>
</table>

### Project cost per shelter
- **Materials cost per shelter:**
  - Shelter structure under construction.
  - Completed shelter structure.
  - Traditional tanned skin roof cover.

### Project outputs
- **3,000 households May 2012**
  - Férério Refugee Camp:
  - Number of people displaced: 2012:
    - Conflict:
      - Province:
        - Country:
          - March 2012 – Project start
          - Project end
          - Project duration
          - Number of beneficiary households
          - Project size
          - Infrastructure
          - Materials list
          - Quality
          - Provider
          - Distribution
          - Timing
          - Rehabilitation
          - Sustainability
          - Ownership
          - Security
          - Sanitation
          - Health
          - Nutrition
          - Education
          - Economic
          - Environmental
          - Social
          - Humanitarian
          - Development
          - Disaster
          - Human Rights
          - Conflict
          - Climate
          - Environment
          - Economy
          - Society
          - Political
          - Security
          - Development
          - Human Rights
          - Conflict
          - Climate
          - Environment
          - Economy
Field monitors checked the structures during and after construction.

As Tuareg women had a traditional leading role in tent construction, it was they who led the construction groups. Each group would complete one shelter at a time. The community specifically said that they did not require the agency’s support in construction and, in the case of vulnerable families, men helped to dig the pole-holes while the women groups erected the shelter. Due to the communal organisation of childcare and of many other often female-dominated activities it is not thought that the women were over-burdened by their construction responsibilities.

As a side-project, the agency contributed to the reduction of work carried out by children through the provision of donkey carts for the collection of water.

### Site planning and WASH

Families did not like living in close proximity to each other and traditionally lived spread out.

The camp held more than 25 tribal groups. The camp population re-organised itself according to these groups. A standard camp grid plan could not be applied to this more “organic” spread of families and if the refugees did not like where they were sited they simply dismantled their shelter and moved it somewhere else.

Agencies working on water and sanitation continued place latrine blocks according to the site plan instead of adapting it to the settlement patterns of the refugees. As a result, a high percentage of the refugee population did not use the latrines either because of the long distance (sometimes up to 500m) or because some tribes refused to share latrines with other tribes.

### Technical solutions

The shelter model chosen was similar to a traditional Tuareg tent. It had a wooden-pole structure but instead of the traditional tanned skins for the roof and walls plastic sheeting was used. In some cases families used the emergency tents that had been provided earlier as roofing material.

Tuareg tents are suited to the environmental conditions: high wind loads, high temperatures and sand storms. The shelter contained no concrete so did not worsen water scarcity. The sides of the shelter were made from mats which could be re-positioned in order to change the location of the doors depending on the direction of the wind.

The shelter could be disassembled and relocated to another location without any material wastage, and women knew how to maintain them. Materials could be taken with families when the camp closed.

Tanned animal skins took too long to produce, and were not an option as a roofing material. To replicate the thermal insulation qualities of the skins, a set of nine woven straw mats were placed under the two plastic sheets.

The refugees paid a lot of attention to detail in construction. The two plastic sheets provided were hand sewn together while the 8mm rope connecting the plastic sheets to the roof was skilfully secured in place by tying it to the corner poles of the shelters.

### Materials Quantity

<table>
<thead>
<tr>
<th>Stage 1 - structure</th>
<th></th>
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<tbody>
<tr>
<td>Eucalyptus Poles</td>
<td>16</td>
</tr>
<tr>
<td>Green wood. Length = 4m</td>
<td></td>
</tr>
<tr>
<td>6cm diameter at mid length</td>
<td>18</td>
</tr>
<tr>
<td>Eucalyptus Poles</td>
<td></td>
</tr>
<tr>
<td>Green wood. Length = 4m</td>
<td></td>
</tr>
<tr>
<td>4cm diameter at mid length</td>
<td>2x20m</td>
</tr>
<tr>
<td>String 0.3cm diameter</td>
<td></td>
</tr>
<tr>
<td>Machete</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage 2 - coverings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rope 0.8cm diameter</td>
<td>30m</td>
</tr>
<tr>
<td>Plastic mats (1.2m x 2.5m)</td>
<td>8</td>
</tr>
<tr>
<td>Plastic sheeting (4mx5m)</td>
<td>2</td>
</tr>
<tr>
<td>Straw mat (1m x 1.8m)</td>
<td>9</td>
</tr>
</tbody>
</table>
A.1 Central African Rep. – 2013 – Conflict

Case study

Keywords: Emergency shelter.

Date: December 2013 onwards.
Damage: 17,000 houses heavily damaged (January 2014).
People affected: Peak of 922,000 displaced in January 2014.
Project location: Bangui City, 5th Arrondissement (District).
Beneficiaries: Capacity of 1,050 people per night.
Outputs: 31 communal shelters; 44 latrines; 15 shower areas; NFI distribution.
Usage rate: Average of 2,700 people per night March-April 2014 (peak of 4,000). 550 per night in May 2014.
Shelter size: Communal night shelters = 70m², designed for 2m² covered space per person.
Cost: Approximately US$ 500-700 per shelter, US$ 15-20 per sleeping place

Project description:

In response to security issues for returning IDPs, a women’s training centre was converted into “Ben-Zvi Night Shelter” – a secure site with communal shelter for people worried about night-time security. The facility was open from 6pm to 6am in an area where security was maintained by the presence of international peacekeeping troops.

Emergency timeline:

[a] Dec. 2013: Increased conflict in CAR. Insecurity ongoing as of September 2014, though project area secure.

Project timeline (number of months):

[1] Project planning phase.
[2] Construction of communal shelters and WASH facilities inside compound by implementing INGO. Management handover to local NGO.
[3-8] Shelters in use.
[9] Planned project end.

Strengths

✓ The target population remained safe from armed groups and looters.
✓ Good hygiene standards.
✓ Population live in their home community during the day, rather than becoming IDPs, and therefore require less assistance.
✓ Beneficiaries keep their jobs, houses and businesses making economic recovery less of an issue.
✓ Feedback from beneficiaries suggested that night shelter was sufficient, very few requested 24-hour shelter provision.

Weaknesses

✗ Due to security concerns it was hard for the agency to verify the numbers reported by the local partner.
✗ No services, such as primary healthcare, at the site.
✗ Young women’s physical safety was an issue at the site, compounded by lack of lighting. The issue of lighting was solved at a later stage.
✗ The site had problems with drinking water supply.
✗ The planned capacity was exceeded at the start of the project, and during periods of high insecurity. Hygiene risks linked to overcrowding were mitigated by shelters only being used at night.

Observations

- The project was combined with an economic recovery program in the 5th District.
- Night shelters have high costs and may be used irregularly or have short lifespans. Maintenance budgets for such sites are hard to plan as it is hard to predict their usage.
Situation before the conflict

The target population had been living in a residential neighbourhood in Bangui (5th District), made up of a mix of religious groups. A Bangui-wide survey was organised by an INGO in September and October 2013. This assessment showed that the average size of households had increased rapidly due to a massive inflow of people caused by the high level of insecurity outside Bangui. This increase in households’ size was already causing stress on host families’ livelihoods.

Situation during the conflict

Following the violence in December 2013 in Bangui, around half a million people moved to makeshift sites within the capital. In some cases, people moved just a few hundred metres from their homes, taking refuge in buildings such as churches or schools.

Others fled to improvised IDP camps, often at a considerable distance from their homes. The ability of displaced people to return to their home communities was hampered by poor security, particularly at night. During the night people were more likely to be victims of armed robbery or abduction.

As reliable information on the security situation was very limited, many rumours circulated in the city, making the fear of violence just as important to those affected as the actual risk of an attack.

In the project area of the 5th District it appeared that most of the residents had fled during the beginning of the insecurity, though some remained. Most Muslims took refuge in the community of the 3rd district whereas others fled in large numbers to the IDP camp at M’Poko airport.

Shelter strategy

In response to the huge displacement of people within Bangui, as well as in the provinces, the Shelter Cluster set the goal of ensuring that displaced populations were protected from the physical elements and could live in dignified conditions, without threats to their personal security. A two-fold strategy was developed:

- Distribution of NFI kits, including emergency shelter items such as tarpaulins. These were aimed mostly at populations in dispersed settlements; and
- Construction of community shelters, aimed at grouped settlements in the urban area of Bangui.

Project implementation

The project was a pilot project as part of a return strategy, and a livelihoods project ran in parallel in the district to try and help returnees re-establish themselves. The project was not replicated immediately due to security issues reducing access and a difficulty in finding other suitable sites.

The mayor of the 5th District made the original proposal to the main organisation to set up a night shelter for returning IDPs.

A disused women’s training centre was identified as the site that would be converted into a communal night shelter site. The centre was made up of three buildings and a yard surrounded by a high wall on three sides, with a fence at the front. This protected area made it a good candidate for providing a secure compound.

The project was planned by the main organisation, while the structures were built by an international NGO as implementing partner. The project was part of a general programme of emergency shelter and water and sanitation. The main organisation provided funding for the day-to-day management, responsibility for which was handed over to a local NGO. The main organisation also provided funds for improved lighting.

To provide night shelter for a target population of 1,050 people, 31 communal shelters, 59 latrines and 15 showers were constructed inside the compound.

At the start of the project, the people who used the refuge came from neighbourhoods in the immediate vicinity. As tensions increased in Bangui, the profile of the night shelter population changed.

Each community shelter was named after the original neighbourhood area of the occupants, and people usually slept with their families and neighbours.

During the early stages of the project, an agreement was made with the international protection force that they would include the compound as part of their patrol, but remain outside of the compound. This was particularly important as
the INGO implementing partner was highly visible within the site. Once the site management was handed over to a local NGO, soldiers from the Support Mission to the Central African Republic (MISCA) were based inside the camp.

One case of gender-based violence was reported on the site. The victim was referred to the Protection Cluster for support, and lighting on the site was improved to reduce the risk of further incidents. Security issues prevented the main organisation from visiting the site once management had been handed over to the local NGO, and it was not always possible to get clear reports from the site managers.

As the situation in the area becomes more secure, the centre will be able to resume its normal activities. Currently, the international implementing partner is providing maintenance of WASH infrastructure and has a budget for rehabilitating the site once the project is finished. One positive bonus of the project is that the site now has an improved electrical installation and better lighting, which will be of benefit when the site is rehabilitated.

**Beneficiary selection**

There was no official selection process—all those who wanted to stay in the night shelter compound were accepted. However, the intended capacity of the site was exceeded during periods of heavy violence, leading to overcrowding and many beneficiaries sleeping outside on the ground, exposed to the elements.

**Coordination**

Coordination with the military, both the French mission and MISCA, was an extremely important factor in the refuge being able to provide a secure shelter option.

Steps were taken, however, to emphasise the independent agenda of humanitarian organisations, even if weekly coordination meetings between international organisations, local authorities, and armed forces were necessary. Coordination meetings were organised away from the project area. The demarcation was less clear once the INGO left the project site.

Coordination with other humanitarian agencies was enhanced as the night shelter site provided a focal point for other agencies to conduct projects, for example, child protection. Attempts to secure extra funding for clean drinking water transportation failed, and this unfortunately meant that potable water was not always available.

**Design and materials**

Plastic sheeting and toilet slabs were supplied by the donor; timber was locally sourced.

Although the shelter design allowed for partitioning the shelters with internal curtains, this was not implemented.

Separate male and female shower and latrine areas ensured privacy for the users.

**Wider project impacts**

Increased security at night, with people’s personal security guaranteed and the ability to bring in portable valuables, minimised the human and economic cost of the conflict in the area, since people could return to their neighbourhoods during the day.

Surveys in IDP sites showed that the proximity of a night dwelling site to their daytime activity area was a key factor in the selection of a night shelter, including spontaneous sites. Secure sites that were suggested to IDPs but were located far away from their neighbourhoods, were rejected.

Later attempts to identify additional transitional night shelters, such as the one described in this case project, failed for different reasons, including a lack of government approval, or lack of security.

The deployment of the European Union Force (EUFOR) in the 3rd District of Bangui, and the development of a stabilisation strategy, means that the experience gained through this pilot project will be useful for developing future return strategies.

Night shelters need to be accompanied by support for rebuilding economic activities if they are to work as part of a return strategy, as economic recovery has been identified as the second most important factor (after security) in deciding whether to return.

“"The protection of the population is improved and we can reach people with other projects such as hygiene promotion.”

Local partner
A.4 Côte d’Ivoire – 2010–2011 – Post-election Crisis

Overview:
Keywords: Returns, Household items, Construction materials, Core housing construction, Housing repair and retrofitting, Vouchers, Advocacy / legal, Training.

Summary
The November 2010 election in Côte d’Ivoire triggered violence that lead to the displacement of up to a million people. The western part of the country was particularly affected. Families were displaced both within Côte d’Ivoire and over the border in to neighbouring Liberia.

Support for returnees by international organisations focused on rebuilding communities as well as houses. About 30 per cent of the 24,000 households whose houses had been damaged or destroyed were targeted by the coordinated interagency response. About one third of those assisted were in spontaneous sites.

Organisations supported only the most vulnerable households, assuming that most households had the capacity to rebuild on their own.

Background
Côte d’Ivoire is a lower-middle-income country experiencing significant demographic changes. The proportion of people living in cities in Côte d’Ivoire has risen from 15 per cent in 1960 to 50 per cent in 2010.

Despite long term efforts by the government to encourage housing construction through the private sector, there remains a shortfall of around 400,000 houses.

Côte d’Ivoire’s development has been hindered by conflict in 2002, 2008 and 2010-2011.

The conflict
The violence associated with the 2010-2011 post-election crisis was particularly destructive in the west of Côte d’Ivoire, where approximately 24,000 houses were damaged or destroyed.

At the height of the crisis in early 2011, up to a million people were thought to be displaced, including over 700,000 within or from Abidjan. More than 200,000 people fled to neighbouring countries.

Relations between some communities had been strained due to issues of immigration, ethnicity and access to agricultural land. The violence further damaged relations between the different communities.

Lack of physical security in the west due to ongoing hostilities meant that thousands of families were afraid to return to their villages of origin. Many of those wanting to return cited damaged houses as one of the main impediments to return.

The fragile security situation continued well into 2012.

Emergency phase in 2011
Although the Coordination mechanism for the response was established in January 2011, a Coordinator was not in place until March 2011.

Between January and September 2011, organisations assisted 8,150 households with emergency shelter support. About 35 per cent of this assistance went to support the displaced people in various spontaneous settlements in the west, such as the Catholic Mission in Duékoué camp, which housed around 27,000 IDPs at its peak.

The rest of the shelter support, in the form of support for repairs and reconstruction, was largely targeted at returning IDPs and repatriated refugees.

Early Recovery Strategy
Given the problems at the core of the crisis, it wasn’t simply the houses that needed to be repaired and rebuilt, but also the communities themselves. The goal was to support vulnerable households through a community-based approach that would promote positive relations within the community and to reinforce existing coping mechanisms. The following two case studies (sections A.5 and A.6) all adopted this principle in slightly different ways, depending on the context.

Non-food items were provided to returnees and those directly affected by the crisis.

Photo: Neil Brighton
After the emergency, the focus was on supporting vulnerable households to rebuild their mud-brick or wattle and daub buildings.

**Self-recovery**

Before deciding on a target for the number of households to support, an assessment was made of how many people would be able to conduct their repairs without external assistance.

In Western Côte d’Ivoire, the vast majority of households lived in houses that are built with materials found locally and were either constructed from mud-bricks or wattle and daub. The roofs were thatched or covered in corrugated iron. Though the house walls were prone to erosion from rain and wind, and were relatively weak, they were built by the households themselves and contributed to a high self-recovery rate.

By mid-2012, the affected communities themselves had rebuilt approximately 50 per cent (11,500 houses) of the destroyed mud-brick and wattle and daub houses. This type of construction made up approximately 90 per cent of the damaged or destroyed buildings.

Only vulnerable households were targeted, as a significant proportion of the population was both able and willing to rebuild themselves.

Although the government had the primary responsibility to assist those affected by the crisis, it lacked resources to support the entire population and was not able to respond quickly enough.

Of the 24,000 damaged or destroyed houses in the west, international organisations targeted 8,775 vulnerable households in 2012. Of these, 7,200 had earth-brick or wattle and daub houses.

Some organisations worked on confined masonry buildings, but this was a small proportion of the response. Return kits were also distributed to displaced households returning home.
**Government response**

The government made both food and non-food item distributions in the emergency phase. In the summer of 2012 the government announced that a permanent housing project would target 1,000 households in the Department of Duékoué. Though this capacity was welcomed, the decision was taken unilaterally with little consultation with the humanitarian community who had been working in the target area since mid-2011.

**The coordination team**

The shelter coordination team consisted of one coordinator and three protection monitors from a local organisation. It was in place from January 2011 to December 2012. The protection monitors assessed the damaged and destroyed houses, and assessed the capacity of communities to reconstruct without external assistance.

This team proved invaluable for collecting critical baseline data, which informed the shelter strategy in different organisations’ project planning.

**Closing of the coordination system**

By mid-2012, the security situation in Côte d’Ivoire was beginning to stabilize and life was returning to normal. The decision was taken in August 2012 to close the coordination system by the end of the year. The table below summarises the collective goals for the response and the extent to which those goals were met.

<table>
<thead>
<tr>
<th>Goal for 2012</th>
<th>Result achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support 90 per cent of vulnerable households (6,489 households) with damaged or destroyed earth houses (mud-brick or wattle and daub) to rebuild by 31st December 2012.</td>
<td>4,461 households</td>
</tr>
<tr>
<td>Support 25 per cent of vulnerable households (1,425 households) with lightly damaged confined masonry houses to rebuild by 31st December 2012</td>
<td>434 households</td>
</tr>
<tr>
<td>Support 10 per cent of households (1,150 households) that are building back their own house with some material or technical assistance by 31st December 2012</td>
<td>200 households</td>
</tr>
<tr>
<td>Support 90 per cent of affected households (37,455 households) that lost essential household items with distributions of NFI Return Kits by 31st December 2012</td>
<td>37,455 households</td>
</tr>
</tbody>
</table>
### A.5 Côte d’Ivoire – 2010–2011 – Post–Electoral Crisis

#### Case study:

**Keywords:** Returns, Urban neighbourhoods, Construction materials, Core housing construction, Housing repair and retrofitting, Vouchers, Advocacy/legal, Training.

<table>
<thead>
<tr>
<th>Country:</th>
<th>Côte d’Ivoire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project location:</td>
<td>Duékoué, Western Côte d’Ivoire</td>
</tr>
<tr>
<td>Conflict:</td>
<td>Post-electoral crisis</td>
</tr>
<tr>
<td>Conflict date:</td>
<td>2010 to 2011</td>
</tr>
<tr>
<td>Number of houses damaged:</td>
<td>24,000 in Western Côte d’Ivoire</td>
</tr>
<tr>
<td>Number of people displaced:</td>
<td>1 million people nationwide 150,000 displaced in the West</td>
</tr>
<tr>
<td>Project target population:</td>
<td>1,465 households 7,325 people</td>
</tr>
<tr>
<td>Project outputs:</td>
<td>1&lt;sup&gt;st&lt;/sup&gt; project: 335 households 2&lt;sup&gt;nd&lt;/sup&gt; project: 1,130 households</td>
</tr>
<tr>
<td>Occupancy rate on handover:</td>
<td>Between 75 per cent and 100 per cent</td>
</tr>
<tr>
<td>Shelter size:</td>
<td>28m², 2 rooms.</td>
</tr>
<tr>
<td>Materials cost per shelter:</td>
<td>US$ 580 Materials US$ 80 Labour</td>
</tr>
<tr>
<td>Project cost per shelter:</td>
<td>(Total project / number shelters): US$1070</td>
</tr>
</tbody>
</table>

**Project timeline**

- 19 months – 1130 houses constructed
- 2 months – Start manufacturing bricks
- 1 month – Identification of needs, selection of villages
- May 2011 April 2011 – Crisis ends Voluntary returns in Duekoué area
- November 2010 – Post electoral crisis and displacements

#### Project description

The lead organisation worked with three partners to provide houses for vulnerable returnees, whose house was damaged by the post-electoral crisis. The project had the goal to sustainably improve the living conditions of returned households by providing one shelter per household. At the end of the project over 1,130 houses were built or rehabilitated by one of the three partners.

**Strengths and weaknesses**

- Every beneficiary helped to make mud-bricks for the whole community. This led to strong involvement of the population throughout the project.
- By supporting local technicians, the project injected cash within the communities.
- Training sessions entitled “building back better” gave people the opportunity to share experiences and construction methods and to discuss different related issues such as sanitation and hygiene.
- Having access to shelter was a starting point for a new life and a durable return.
- The project found it challenging to ensure that the beneficiaries were the owners of the land and houses because many people had lost their papers during the crisis.
- Difficulties arose in validating beneficiary lists as some chefferies saw opportunity to recover influence over some beneficiaries and NGOs. Traditional decision-making systems, through “chefferie” were undermined by the post electoral conflict.
- In a context of rivalry between communities and a weakened social cohesion, the shelter project targeted mainly people from one ethnic group.

- There was an unforeseen challenge of holes left from brick production. These were dangerous for small children during the rainy season and encouraged poor sanitation making mosquito breeding areas. Work was required to reduce this risk.
- The organisation provided sand to beneficiaries. This was so that they could spend time on agricultural work rather than collecting sand.
Background


After the conflict

As a result of improved security in Côte d’Ivoire in the West of the country, part of the population displaced during the post-electoral conflict had started to gradually return to their places of origin. However, there was significant damage to society, the economy and infrastructure.

In the communities of return, there were significant humanitarian needs and serious risks of secondary displacement.

According to assessments, food and shelter were indicated by returnees as overwhelming priorities, followed by education, health-care and water.

Intercommunity tensions, land disputes and lack of access to basic services represented major protection threats to returnees. Without resolving housing issues it would be difficult to address social needs.

Selection of beneficiaries

The organisation assessed many issues, including the numbers of destroyed houses, ongoing displacements, and returns, mainly in two locations. Households were selected based on criteria defined by the organisation with the communities. Two non-negotiable criteria were that:

- the household was affected by the post-electoral crisis
- their house was either damaged or destroyed.

Other criteria, such as the household social and economic situation before/during/after the crisis, were agreed to better assess the household’s vulnerability with respect to shelter security.

Based on these criteria, a pre-selection list was written down by each village committee, if it existed, or the Village Chief.

People on this list were surveyed with around fifty questions to verify levels of vulnerability. The survey led to the final selection list of beneficiary households.

Land deeds verification

Before the beginning of the construction work, the land deeds that households provided were authenticated. If documents were not available, the identification of land ownership was made in coordination with the local community. In every case the signature of the village chief was required.

In the countryside and the villages, the traditional informal system is predominant. There was no choice but follow the statements of the chief of lands and the village chief. In some questionable cases, the organisation also interviewed the neighbours. The land service of the municipality was sometimes also able to help.

Eventually only 6 households were excluded on account of land not being identified.

Implementation

All construction materials were provided. Doors and windows were constructed by local carpenters. Metal sheets were given for the roof.

One mason and one carpenter were paid to work on several houses. In some remote villages householders recruited builders, who were then paid with vouchers.

The organisation provided tools and equipment that had to be given back at the end of the construction

Every step of construction or rehabilitation was checked by a technical supervisor and the team leader. A form with key points was completed to check whether or not the house was ready to be occupied.

Each beneficiary participated in the following activities:

- manufacture of mud bricks
- preparation of the mortar
- involvement throughout the construction so that they could later upgrade their houses.

Training

Regular trainings and meetings were organised by the organisation in order to keep a high level of motivation and involvement throughout the project. Specific attention was paid to the following aspects:

- In most communities, the population was not accustomed to working together and every step of the project required a meeting with all households.
- Rehabilitations often require technical skills and as a result are led by local masons and carpenters. To ensure participation, beneficiaries were asked to collectively produce mud-bricks.
- Some beneficiaries finished their houses earlier than the others.
They were required to continue participating in the fabrication of mud-bricks.

The following trainings were conducted:

- Mobilisation and the role of the committee: The committee was established to assist the organisation in the daily work and to take project ownership. Trainings about mobilisation were repeated every time they were needed.
- How to improve the shelter: Before the households choose the shelter design, a training gave advice on improving the resistance of a house against rain and humidity (simple principles of the reaction of mud-bricks to humidity, and how protect the base from water).
- Explaining what is expected from the committee members and role allocation (e.g. president, secretary, storekeeper).
- There were occasional awareness raising activities regarding cleaning the village.

The trainings were conducted by the mobilisation team members. Technical trainings were given by the technical supervisors.

**Handover**

When the project was over in a village, the village committee initiated a key-giving ceremony.

**Coordination**

Few organisations were working in the same area, and coordination helped to avoid gaps and duplications in areas targeted by the different actors.

Coordination also allowed organisations to exchange information on technical issues and challenges faced as well as to share analysis about socio-economic trends.

**Technical solutions**

Two designs were proposed for the construction, and households chose the design that they wanted:

- Classic: walls made of dried mud-bricks joined by mortar with a corrugated iron roof supported by a wooden roof structure.
- Improved: This was a more rain resistant shelter. The walls were made of dried mud mixed with cement bricks, with cement mortar on the base and the first four rows, and with mud mortar for the rest of the building. The roof and its structure were the same as the traditional design.

**Rehabilitations**

Where buildings were rehabilitated, repairs were based on an assessment of needs and observed damage. Most of the time, they consisted in replacing or repairing the roof.

Every building was assessed by the technical supervisors who completed a bill of quantities. This was then checked by the technical team leader and the programme manager. A random control took place in every village, led by the Program Manager and Technical Team Leader.

Sometimes, the level of support required was too high for the available budget. In these cases the beneficiary household was asked to provide materials to fill the gap.

**Staffing**

The entire project was managed by a staff of 22 people: A project manager assistant, a field logistician, a mobilisation team leader, 7 mobilisation agents, a technical team leader and 11 technical supervisors. The team used 4 cars (pick-ups and one 4x4)

**Logistics**

In each village, with the support of the population, a storage area was identified for all construction material for every household. This area was managed by a local storekeeper chosen by beneficiary households and supervised and trained by the organisation.

All supplies were purchased from the nearest town of Duékoué.

**Materials list**

<table>
<thead>
<tr>
<th>Materials</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall and base construction:</td>
<td></td>
</tr>
<tr>
<td>Sand</td>
<td>3m³</td>
</tr>
<tr>
<td>Cement “A 32.5 N”</td>
<td>12 sacks</td>
</tr>
<tr>
<td>Mud-brick</td>
<td>1,200pcs</td>
</tr>
<tr>
<td>Red wood</td>
<td>1pc.</td>
</tr>
<tr>
<td>15cm x 3cm x 400cm</td>
<td></td>
</tr>
<tr>
<td>Doors and windows:</td>
<td></td>
</tr>
<tr>
<td>Plank 25cm x 4cm x 200cm</td>
<td>7pcs.</td>
</tr>
<tr>
<td>Rafter 8cm x 6cm</td>
<td>4pcs.</td>
</tr>
<tr>
<td>Nail n°6</td>
<td>2kg</td>
</tr>
<tr>
<td>Nail n°8</td>
<td>1kg</td>
</tr>
<tr>
<td>Nail n°10</td>
<td>2pcs.</td>
</tr>
<tr>
<td>Crochet medium</td>
<td>2pcs.</td>
</tr>
<tr>
<td>Pairs of split hinge 140 steel</td>
<td>4pcs.</td>
</tr>
<tr>
<td>Paris of split hinge 110 ordinary</td>
<td>4pcs.</td>
</tr>
<tr>
<td>Door handle</td>
<td>2pcs.</td>
</tr>
<tr>
<td>Lock</td>
<td>1 packet</td>
</tr>
<tr>
<td>Wood screw</td>
<td>1 packet</td>
</tr>
<tr>
<td>Carpentry:</td>
<td>18pcs.</td>
</tr>
<tr>
<td>Rafter 8cm x 6cm</td>
<td>12pcs.</td>
</tr>
<tr>
<td>Rafter 6cm x 4cm</td>
<td>1 packet</td>
</tr>
<tr>
<td>Nail n°8</td>
<td>3 packets</td>
</tr>
<tr>
<td>Wire</td>
<td>15m</td>
</tr>
<tr>
<td>Roof:</td>
<td></td>
</tr>
<tr>
<td>Corrugated iron (2m x 0.8m)</td>
<td>33</td>
</tr>
<tr>
<td>Nail n°6</td>
<td>2 packets</td>
</tr>
<tr>
<td>Rubber band for washers</td>
<td>5pcs.</td>
</tr>
</tbody>
</table>

See A.4 Côte d’Ivoire – CONFLICT Coordination helped to avoid gaps and duplications in areas targeted by the different actors. Coordination also allowed organisations to exchange information on technical issues and challenges faced as well as to share analysis about socio-economic trends.

**Technical solutions**

Two designs were proposed for the construction, and households chose the design that they wanted:

- Classic: walls made of dried mud-bricks joined by mortar with a corrugated iron roof supported by a wooden roof structure.
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**Logistics**

In each village, with the support of the population, a storage area was identified for all construction material for every household. This area was managed by a local storekeeper chosen by beneficiary households and supervised and trained by the organisation.

All supplies were purchased from the nearest town of Duékoué.

**Materials list**

<table>
<thead>
<tr>
<th>Materials</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall and base construction:</td>
<td></td>
</tr>
<tr>
<td>Sand</td>
<td>3m³</td>
</tr>
<tr>
<td>Cement “A 32.5 N”</td>
<td>12 sacks</td>
</tr>
<tr>
<td>Mud-brick</td>
<td>1,200pcs</td>
</tr>
<tr>
<td>Red wood</td>
<td>1pc.</td>
</tr>
<tr>
<td>15cm x 3cm x 400cm</td>
<td></td>
</tr>
<tr>
<td>Doors and windows:</td>
<td></td>
</tr>
<tr>
<td>Plank 25cm x 4cm x 200cm</td>
<td>7pcs.</td>
</tr>
<tr>
<td>Rafter 8cm x 6cm</td>
<td>4pcs.</td>
</tr>
<tr>
<td>Nail n°6</td>
<td>2kg</td>
</tr>
<tr>
<td>Nail n°8</td>
<td>1kg</td>
</tr>
<tr>
<td>Nail n°10</td>
<td>2pcs.</td>
</tr>
<tr>
<td>Crochet medium</td>
<td>2pcs.</td>
</tr>
<tr>
<td>Pairs of split hinge 140 steel</td>
<td>4pcs.</td>
</tr>
<tr>
<td>Paris of split hinge 110 ordinary</td>
<td>4pcs.</td>
</tr>
<tr>
<td>Door handle</td>
<td>2pcs.</td>
</tr>
<tr>
<td>Lock</td>
<td>1 packet</td>
</tr>
<tr>
<td>Wood screw</td>
<td>1 packet</td>
</tr>
<tr>
<td>Carpentry:</td>
<td>18pcs.</td>
</tr>
<tr>
<td>Rafter 8cm x 6cm</td>
<td>12pcs.</td>
</tr>
<tr>
<td>Rafter 6cm x 4cm</td>
<td>1 packet</td>
</tr>
<tr>
<td>Nail n°8</td>
<td>3 packets</td>
</tr>
<tr>
<td>Wire</td>
<td>15m</td>
</tr>
<tr>
<td>Roof:</td>
<td></td>
</tr>
<tr>
<td>Corrugated iron (2m x 0.8m)</td>
<td>33</td>
</tr>
<tr>
<td>Nail n°6</td>
<td>2 packets</td>
</tr>
<tr>
<td>Rubber band for washers</td>
<td>5pcs.</td>
</tr>
</tbody>
</table>

Case study: Keywords: Returns, Urban neighbourhoods, Construction materials, Core housing construction, Advocacy / legal, Training.

Country: Côte d’Ivoire
Project location: Duékoué, Western Côte d’Ivoire
Conflict: Post-electoral crisis
Conflict date: 2010–2011
Number of houses damaged: Approximately 24,000 houses in the west of the country
Number of people displaced: 1 million people nationwide
150,000 displaced in the West
Project target population: 8,046 people
Project outputs: 1341 shelters
Occupancy rate on handover: 99% of the first 421 shelters occupied in July 2012
Shelter size: 36m² (3 rooms) for the house + 2m² for the latrine.
Materials cost per shelter: US$ 585 (Material), US$ 70 (Labour) US$ 200 (Beneficiary contribution)
Project cost per shelter: US$ 886

Project description
This shelter intervention built 1,341 shelters, supporting participation at the household and community levels through self-help groups and shelter committees. The shelter design used abundant local resources and promoted a design well known by the beneficiary households and local builders. The goal of the project was to contribute to the return process through shelter rehabilitation for the most vulnerable households.

Strengths and weaknesses
✓ More than half of the work was completed by the beneficiaries through self-help groups.
✓ Maximises the use of local resources which provide all the masonry material (bricks and mortar) while at the same time limiting local environmental impact.
✓ By adapting the design, and ensuring strong community involvement and good quality of work, capacity to build and to maintain shelters was improved.
✓ By using mud blocks and mortar, the organisation built larger shelters with the same cost as shelter projects led by other organisations.
✓ Given that one of the major concerns of the IDPs and refugees was the loss of their homes, shelter reconstruction supported durable return after the crisis.
✗ It was sometimes difficult to verify whether the house was destroyed during the 2010–2011 post-electoral crisis, or as a result of a previous crisis.
✗ The project staff found it challenging to resolve land tenure disputes. There was no formal system of land tenure security, and some disputes arose when shelters for migrant households were rehabilitated. Work continued into 2013 to solve the disputes.
✗ The second phase of the project began a few months before the start of the rainy season in March and ended two months after the rainy season in December. This greatly affected the production of mud bricks as well as masonry works.
✗ Despite an initial awareness campaign at the start of the project, it was necessary to regularly re-explain the beneficiary selection criteria, especially with newly arrived returnees that could not be selected given the time and resource limitations of the project.
Strengths and weaknesses

It was sometimes difficult to verify whether the reconstruction supported durable return after the crisis.

Given that one of the major concerns of the IDPs was the loss of their homes, shelter projects led by other organisations built larger shelters with the same cost as shelter projects funded by the organisation.

By adapting the design, and ensuring strong community involvement and good quality of work, the project was able to reduce costs and build more shelters.

Case study:


US$ 886

US$ 200 (Beneficiary contribution)

US$ 585 (Material), US$ 70 (Labour)

Materials cost per shelter:

2m² for the latrine.

36m² (3 rooms) for the house +

Occupancy rate on handover:

1341 shelters

8,046 people

Project target population:

150,000 displaced in the West

Number of houses damaged:

Approximately 24,000 houses in Côte d’Ivoire’s Montagnes region

Conflict:

Duékoué, Western Côte d’Ivoire

Project location:

CÔTE D’IVOIRE

Selection of beneficiaries


The first project was implemented in Duekoué and Bioloéquin, departments where the reported destruction was most severe. About 2,200 houses were destroyed in the 11 selected districts.

The communities provided their own list of households, which was confirmed by a door to door survey.

The vulnerability criteria were based on: gender of head household, age, presence of disabled people in the family, household size, household economic resources, food security scoring, ownership or access to land, and willingness to participate in the reconstruction of the shelter.

The provisional lists were publicly posted for two weeks to allow for feedback from the community.

Land

Formal land documentation generally does not exist in Western Côte d’Ivoire. Sites were visited with the traditional authorities to certify that the head of family was the landowner.

There were some conflicts between different communities, often between Autochthon communities and migrant communities.

For 40 families with land issues, solutions were found by working with the local administration. This was done with the assistance of a legal assistance programme that the organisation was running. It took about four months to agree on durable land for these families.

Implementation

2,500 mud bricks were produced per household (2,000 for the shelters and 500 for the latrine) through the work of the self-help group formed of 8 households. Each self help group was provided with tools and brick moulds at the start of the project. A community mobiliser and the shelter committee supported the beneficiaries throughout the process.

The organisation started construction once the beneficiaries had produced the required number of mud bricks and dug the latrine pit. The first step in the construction was the trenching and laying of the foundation.

The wall was built in three steps, with two days to dry at each step: 1) five rows of bricks, 2) five rows of bricks, and 3) build the gable. The work was done by a mason while the household prepared the mortar and supplied the necessary water.

Constructing the roof took two days: one day for the carpentry and another day to fix the corrugated roofing sheets. Simultaneously, the mason built the latrine walls.

Once all houses in the village were completed a closure ceremony was held.

Self help groups

Self-help groups were created with the aim of encouraging collective work, especially to ensure bricks were available for weak, old or disabled people. In practice, it was almost impossible to mix people from different communities to work together, and it was difficult to stimulate a team-work with 8 to 10 families to produce enough bricks. The majority of households decided to work alone or with family members.

At the end of a training session, each self-help group received a construction kit to share (spade, hoe, shovel, 1m³ water tank and jerrycan).

Shelter committees

Shelter committees were established to empower and mobilise people in the project. They regularly checked on the number of bricks made, and created a ranking which determined the order in which they would build houses.

Training

Basic messages were shared about maintenance of the drainage, plastering the sill as well as door making and installation of latrines.

Each household received a brick mould. Trainings about mud bricks production and self-help group work were held at the start of the project. These trainings took about half a day per group and were led by a site manager.

Each household received two 1½ hour trainings on shelter and hygiene promotion. In total there were six trainers (five technicians and one social mobiliser).

Background


Selection of beneficiaries

The first project was implemented in Duekoué and Bioloéquin, departments where the reported destruction was most severe. About 2,200 houses were destroyed in the 11 selected districts.

The communities provided their own list of households, which was confirmed by a door to door survey.

The vulnerability criteria were based on: gender of head household, age, presence of disabled people in the family, household size, household economic resources, food security scoring, ownership or access to land, and willingness to participate in the reconstruction of the shelter.

The provisional lists were publicly posted for two weeks to allow for feedback from the community.

Land

Formal land documentation generally does not exist in Western Côte d’Ivoire. Sites were visited with the traditional authorities to certify that the head of family was the landowner.

There were some conflicts between different communities, often between Autochthon communities and migrant communities.

Only 40 households out of 2,200 had land tenure issues that required some external intervention...
Coordination
The main humanitarian actors acting in the shelter response met twice a month until July 2012 thereafter meeting once a month. Meetings were held in both Abidjan and in the West.

Coordination helped to define the areas of intervention between the different organisations as well as to communicate figures from the start of the returnee movement. In addition, coordination was essential in order to share information on design, costs and to adopt a common response on the ground.

Technical solutions
Mud bricks were selected as the easiest way to ensure a good quality of implementation, as it is a very common construction material in western Côte d’Ivoire. Cement was not used in the mortar as it would be above local standards and would increase the cost per shelter thus decreasing the number of beneficiaries.

The organisation referred to the shelters as “improved design” relative to other houses on account of the corrugated iron roofing sheets, latrines and quality of the platform. It was based on a common design of shelter in Western Côte d’Ivoire but was larger than many houses in the area.

Staffing and structure
The organisational structure was:
• one social mobiliser responsible for group mobilisation, hygiene promotion and assessments
• five site managers (one for two to three locations) responsible for following works, masons, carpenters, trainings and materials supply. Site managers and mobilisers spent 80 per cent of their time on the ground
• six community mobilisers (one for two locations). Locally hired community mobilisers received a monthly allowance and monitored construction
• 11 committees in which positions were chosen to represent the three communities in the region
• one project coordinator to supervise the operations.

Logistics
Tenders were issued for reinforced concrete slabs for the latrines, corrugated iron sheets, timbers and other materials. Suppliers delivered directly to each community, except for roofing sheets, which were centrally warehoused.

The mud bricks were produced locally in the communities. Each household stored them close to the future construction site.

Field warehouses were set up to store timbers, frames and equipment.

Shelter committees distributed materials supervised by the organisation. Materials were distributed on completion of each phase of construction. Special attention was paid to the corrugated iron, as households were tempted to sell it.

60 to 80 different masons and 10 to 20 different carpenters were directly contracted, mainly from the villages where the shelters were to be built.

Maintenance
Around half of the shelters were upgraded by their occupants with concrete screed and plastering. However, people mainly plastered inside the room in preference to plastering the façade, failing to maximise shelter durability.

At the end of 2012, about 80 per cent of the drainage around the shelters was still maintained. More than three-quarters of the latrines were in use, although some were used as showers. Hygiene promotion activities continued into 2013.

Some masons contracted by the organisation built the house design for other private contractors, but they did not use metal roofing sheets due to the cost.

Materials list

<table>
<thead>
<tr>
<th>Materials</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGI sheets</td>
<td>45 pieces</td>
</tr>
<tr>
<td>Timbers</td>
<td>33 pieces</td>
</tr>
<tr>
<td>Mud bricks</td>
<td>2,500 pieces</td>
</tr>
</tbody>
</table>
A.4 DRC, Goma - 2009 - Conflict displaced

Case study: Urban host families, vouchers

Country: Democratic Republic of Congo
Disaster: Ongoing armed conflict
Disaster date:
- 1994 - Conflict in eastern DRC
- 2008 - Offensive towards Goma
Number of houses damaged: Unknown
Number of people displaced: >100,000 for this phase of the conflict. Millions cumulatively over the previous 16 years.
Project target population: 250 'solidarity' families
Occupancy rate on handover: 100% on project completion.
Shelter size:
- 11.5m² extension to existing houses.
- Increase from 1.5m² per person to 2.25m² per person.
Materials Cost per shelter: 680 USD for shelters, latrines and labour.
Project cost per shelter: 250 USD per person, inclusive of operational / support costs.

Project timeline
- 10 months — Project completion
- 9 months — Distribution of materials
- 8 months — Distribution of second vouchers (food)
- 7 months — Distribution of first vouchers (food and household items)
- 5 months — Community workshops define selection criteria and design for shelters
- 2 months — Project start:
  - Oct. 2008 — New influx of people into Goma
- 1994 — Start of ongoing conflict

Summary
Multi-sectoral support to ‘Umoja’ (solidarity) hosting and hosted families following an influx of displaced people into Goma. Families were provided with materials for either repair or additions / extensions to existing housing, as well as key household items using a voucher system.

Strengths and weaknesses
✓ An alternative to camps was found, and at a lower cost.
✓ Both hosting and hosted families were given a large degree of control
✓ The communities themselves, as well as the authorities and local groups and churches were very involved in the project design and its implementation.
✓ A significant number of the families hosted total strangers. In some cases the hosting family was from a different ethnic or linguistic background than the hosted family. This showed the spirit of Umoja.
✓ Livelihoods of the displaced families were supported through the provision of more secure shelter closer to areas of high economic activity.
✓ Families were able to get the supplier to substitute some materials for a better quality at the same price.
✓ Tensions between host and displaced communities were reduced.
× Initially, many vendors dropped out, making prices for food and shelter items difficult to control. This was later resolved.
× As this was a pilot project, high levels of monitoring and involvement by senior management staff were required.
× High levels of sensitization and monitoring were required
× The project was not supported by pooled funding as it did not fall into pre-defined categories such as Camp Management or Early Recovery.
- Existing houses were smaller than 3.5m² per person. The shelters built by the project respected this to reduce the risk of tensions arising.
- This project was not linked to any formal urban or regional planning.
Before the displacement

There have been multiple large-scale forced displacements of population in Goma since the Rwandan Genocide of 1994. There was also large-scale displacement following the volcanic eruption in 2002.

Prior to the conflicts, the population of Goma had been estimated at less than 50,000 people, but by 2008 the population estimates had reached more than 800,000. For the two neighbourhoods in Goma chosen for the project, both were within the city limits. One, Kasika, had been created in a planned manner, whilst the other, Ndosho, was less planned. Both areas had suffered stresses on infrastructure and water resources before the disaster.

After the displacement

Since 1994, population displacement through conflict has been pendular, with families often moving relatively short distances from their homes, and then returning again, once the levels of insecurity had fallen. However, the approach of the rebels between October and November 2008, and the subsequent fighting in other close-by areas in early 2009 meant that many families would not be able to return home rapidly, and that they would need support for a longer period of time.

The humanitarian community, with the United Nations and the government, were able to provide spaces inside planned camps for 69,000 people. This was not sufficient for the entire displaced population. It also required much funding and resources. The camp locations, outside the city, meant that the displaced families had less access to livelihoods, and less likelihood of achieving any economic independence.

Of those who did not reside in the camps, but who looked for shelter in the city, almost all found shelter with host families. This was arranged through relatives, through introductions, through church associations and through other mechanisms. Some families were hosted for free, whilst others paid rent. In the majority of cases, indoor space for the hosting and the hosted families was greatly reduced, and strains increased as time went on.

Implementation

A multi-sectoral approach was chosen, to support the ‘Umoja’ or ‘solidarity’ of the families who were hosting or hosted. As a pilot project, two neighbourhoods were selected, where a large number of displaced people were living with host families. Key needs, including those of shelter and non food items, were identified through consultation with affected communities.

It was decided to give as much choice as possible to enable the families to choose items that they needed. As a result a voucher scheme was implemented.

Selection of beneficiaries

The organisation worked with a committee that included members of both the hosting and the hosted families. These committees created a list of vulnerabilities, and prioritised or weighted each different category in the list.

The Chef de Quartier provided a list of solidarity families, which were then visited and weighted against various vulnerability indicators. The most vulnerable families were then retained as beneficiaries. Lists were displayed to allow the community to pick out any fraudsters. The committee was very involved in the whole process.

Technical solutions

Standard designs were created before the bill of quantities was finalised. These designs were created through the community consultation process, and then shown to the selected families before construction.

However, as houses had different designs, and plots varied, families were given flexibility in the design that they built. Some families used the materials to repair houses, whilst others used them to build extensions.

For the distribution of household items and food, a voucher scheme was used, in co-operation with a number of selected local merchants. The merchants then returned the vouchers to the organisation for payment. Certain items, such as alcohol, could not be purchased using the vouchers, but otherwise a wide range of items, including mattresses and cooking utensils, was made available to the beneficiaries.

At first, many of the merchants were hesitant about the scheme, but were finally won over. However, at the same time, there were accusations that some of the merchants were over-charging, above the fixed prices that had been agreed with the organisation.

A team consisting of committee members and staff from the organisation monitored the use of vouchers. Families were encour-
aged to barter or leave the shop if prices were too high.

**Logistics and materials**

The food and shelter items were identified as being a priority during the community consultation process. Vouchers were then issued for redemption at approved and selected local merchants. A previous market analysis conducted by the organisation ensured that the local markets would be able to provide all the items. The logistics for the household items was entirely undertaken by the merchants themselves.

The method of distribution of the shelter construction materials was the subject of much discussion with those receiving them. Initially many did not want distribution directly to their homes, as this might incite jealousy from the neighbours. Additionally, the informal layout of the neighbourhoods, and the rough lava-rock surfaces made it difficult for trucks to access all of the target areas.

In the end, two distribution points (one in each of the two communities) were selected for the construction materials. Most of the materials were sourced locally, with an acknowledgement that sourcing timber from sustainable resources is particularly challenging in DRC.

**Materials list**

<table>
<thead>
<tr>
<th>Material</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wooden plank</td>
<td>42 pieces</td>
</tr>
<tr>
<td>2&quot; x 2&quot; wood beam</td>
<td>32 pieces</td>
</tr>
<tr>
<td>CGI sheet BG 32</td>
<td>8pcs</td>
</tr>
<tr>
<td>Cement 50Kg</td>
<td>3 sacks</td>
</tr>
<tr>
<td>Sand</td>
<td>1.09m³</td>
</tr>
<tr>
<td>Rough sand</td>
<td>0.55m³</td>
</tr>
<tr>
<td>Roofing nails</td>
<td>1kg</td>
</tr>
<tr>
<td>10 cm nails</td>
<td>5kg</td>
</tr>
<tr>
<td>8 cm nails</td>
<td>6kg</td>
</tr>
<tr>
<td>6 cm nails</td>
<td>6kg</td>
</tr>
<tr>
<td>4 cm nails</td>
<td>0.5kg</td>
</tr>
<tr>
<td>Door with accessories 80/180cm</td>
<td>1</td>
</tr>
<tr>
<td>Window with accessories 60/40 cm</td>
<td>2</td>
</tr>
<tr>
<td>Wooden plank 2&quot; x 4&quot; (50mm x 100mm)</td>
<td>6 pcs</td>
</tr>
<tr>
<td>Plastic sheet</td>
<td>1 pcs</td>
</tr>
<tr>
<td>Wood preservative oil</td>
<td>5 litres</td>
</tr>
</tbody>
</table>

“The chef de quartier had put us on a list, and after some months the organisation came with many questions. In April we got vouchers to buy food, and for mattresses, blankets and pots. We now cook in our own house. We got more food vouchers in May, and last month we got building material to build an annex to the house. This is very nice and gives us our own space. We built it together in three days, but we still have to put the floor in.”

“ When they came with the vouchers, we bought a mattress and sheets, and this pot. We never had a mattress before! Now we have building material... We have knocked the old house down, and are using the old and the new material to build a bigger house.”
**A.1 D.R. Congo - Goma - 2002 - Volcano**

### Distribution and technical support

- **Project type:**
  - Materials distribution
  - Self-build, with technical support

- **Disaster:**
  - Goma volcano eruption in 2002

- **No. of houses damaged/people displaced:**
  - 15,000 houses destroyed; 87,000 people made homeless

- **Project target population:**
  - 3,000 families initially; increased to 5,000 families
  - Part of a joint intervention targeting 12,625 families

- **Occupancy rate on handover:**
  - All shelters completed

- **Shelter size**
  - 24 m²
  - Total materials cost: US$ 180 (including plastic sheeting)

### Summary

Distribution of mostly locally procured materials for beneficiaries to build their own transitional shelters on self-selected plots after the eruption of the volcano in Goma. The distribution was accompanied by technical support and distribution monitoring.

### Project timeline

- Jan 2002: Volcano erupts
- Mar 2002: First transitional shelters erected
- Oct 2002: 11,307 families assisted

### Strengths and weaknesses

- Adapting local design meant that shelters were easily constructed and durable enough to be adapted to long-term use.
- The self-selection of resettlement sites meant that no new site identification, preparation or infrastructure building was necessary, reducing costs and increasing the speed of plot identification.
- Local authorities and communities were involved in the development of selection criteria and the identification of land plots. A good flow of information between agencies and beneficiaries through community mobilisers meant that few complaints were made about beneficiary selection.
- Open dialogue between agencies meant that coordination was effective.
- Environmental impact was minimised through the adoption of managed local construction practices and materials and the provision of pit latrines.
- The programme was classified as an emergency, which excluded funding of more durable solutions. Despite this, use of transitional shelters meant that beneficiaries could modify structures to later become permanent houses.
- The local economy was partly regenerated through the payment of 30,000 days of labour and the sourcing of local materials.
Strengths and weaknesses (continued)

- The affected population contributed 5,000 individual land plots, 6,000 days of voluntary labour and payment for 14,000 days of contract labour (equivalent to US$ 40,000).
- US$ 140,000 was invested by the affected population itself into the upgrading of their housing units by the end of October 2002.

After six years, a donor assessment found that:
- The project was used as a model for the provision of 8,000 more shelters funded by other donors.
- Transitional shelters had been converted into permanent housing.
- The Disaster Risk Reduction (DRR) projects to monitor the volcano continue, with a weekly report broadcast on local radio.

Situation before emergency

According to an NGO survey, Goma, an important border trading town in the north-east of the Democratic Republic of Congo, had a depressed economy before the eruption, with 46% unemployment and only 40% of people able to sustain themselves and their family on their income.

Before the emergency, shelter conditions were varied, with the average house size containing around 31.5m² of covered living space. The volcano had last erupted in 1977.

After the emergency

The lava flow easily set alight traditional timber-framed houses, covering 13% of the town in a layer of molten rock one to three metres deep in a single day. Much of the central administrative and commercial district was damaged, affecting the capacity of the local authorities to respond.

Some of the 87,000 people displaced sought temporary refuge in communal buildings, while others moved in with relatives whose houses had not been affected. In this way, all found some form of immediate, temporary shelter themselves without direct international agency assistance.

Approximately 80% of the affected population reported that their economic conditions had worsened as a result of the disaster. A quarter had previously used their homes as the base for their income-generating activities.

Implementation

Local authorities suggested a new area of land, largely bush land, for development into a new site. This site was rejected, as it would have required the construction of a whole new infrastructure network (roads, sanitation, etc.) as well as requiring considerable levelling. It would also have meant taking resettled people away from the economic opportunities in the town.

Instead, an emergency shelter response was jointly developed by a group of INGO, UN and local NGO representatives to provide a transitional shelter to families (who met certain criteria) once they had negotiated a new plot to build on within the town itself. This plot was either bought, rented or donated by relatives. This kept the economic activity within the town, used the existing infrastructure and ensured that beneficiaries were resettling somewhere where they wanted to be.

Two examples of the shelter were built and used as project offices so that beneficiaries knew what the shelters would look like and to make it easier to discuss construction issues. These offices, along with scale models, were used to train all households in how to build the transitional shelters.

Tools and a marked length of string, used to measure out bracing sections, were supplied with each kit. Few construction problems were reported due to the simplicity and familiarity of the design.

Although all households received training, around 70% of beneficiaries paid others to construct their housing unit.

By the end of October 2002, the joint intervention had assisted 11,307 families and plans were made to help a further 1,318. Those assisted included all of the families who had occupied the collective sites within the town itself, and families who had been ‘hosted’ by others.

Selection of beneficiaries

Families in collective sites (such as schools) were prioritised as local authorities wished to reopen the schools as soon as possible. The remaining
The transitional shelters measured 5m x 4.8m, provided 24m² of covered living space for five to six people, and followed Sphere minimum standards. The dimensions were defined by locally available timber sizes, in order to maximise section spans and minimize wastage from cutting. The traditional use of volcanic rock for walls was rejected as too slow and difficult to cut and size correctly, and too expensive to transport.

The unit was designed for robustness, without the need for cast foundations, so it could be dismantled and moved if necessary. Beneficiaries were instead encouraged to build up foundations with rocks and earth in order to reduce surface water inside the houses.

The roofs were covered with corrugated zinc sheets, which, despite their high cost and solar gain, were locally known for their ease of use.

As the budget did not stretch to timber-clad walls, the design had to be braced well enough to stand unmodified. The walls were covered with plastic sheeting held in place with timber laths and protected from the weather by the overhang of the roof.

Households normally divided their houses into separate rooms, so the transitional shelter was designed to allow families to partition the space using their own materials or plastic sheeting provided by agencies.

‘Goma’s recovery was dependent largely on economic regeneration. By concentrating the activities within the town itself, this project considered the sustainability of regeneration’. - Donor

Environment
The certification of timber in the local area was difficult to verify, so timber from fast-growing eucalyptus was specified and bought from a number of different sources to minimise potential local deforestation.

Beneficiaries sometimes strengthened the frame with bush sticks. Although the potential environmental damage of this activity was not measured, alternative materials could have been considered at the start of the project.

Each assisted family was also provided with a latrine, improving Goma’s pre-eruption sanitation.

Logistics and materials
Materials were sourced locally where possible. A joint agreement between agencies to share supplier lists and agree on the materials to be provided reduced inter-agency competition and local price inflation.

The possibility of setting up a local timber mill was considered but not implemented. Lack of capacity at the local mills meant that some timber was procured from outside of Goma.

Modification
By October, many had made improvements to their homes, often using salvaged corrugated metal sheeting or timber cladding to replace the plastic sheet walls. However, around 30% of the families felt they could not afford to make these upgrades and would be living in the transitional shelter as provided for some time.

Some enterprising beneficiaries made design modifications. For example, one family paid a contractor to build a kiosk into one end of the house in order to run a small business to raise money for new furniture.

Disaster Risk Reduction (DRR)
This shelter programme was implemented alongside a DRR project to support the Goma Volcano Observatory’s hazard monitoring and a community-based early warning system.
### A.7 Democratic Republic of Congo – 2002 – Volcano

**Update:**

Keywords: Returns, Urban neighbourhoods, Household NFIs, Construction materials, Transitional shelter / T-shelter, Community engagement, Mass communication.

**Project timeline**

- **January 2002** – Volcano erupts
- **3 months** – First transitional shelters erected
- **9 months** – 5000 families assisted with transitional shelter
- **10 years** – Long term assessment of impacts.

**Project description**

This case study summarises an assessment by a major donor of the transitional shelter and recovery programming that it funded in Goma following the volcanic eruption in 2002. The assessment was conducted ten years after the initial response. The assessment found that transitional shelter did help to facilitate the transition to permanent housing, and became a base for many livelihood activities. It also found lasting impacts from both the settlements approach taken and from the supporting activities to help people in Goma to “live with risk”.

### Strengths and weaknesses

- **Transitional shelter really can facilitate the transition to permanent housing.** As intended, nearly all of the original 5,000 “t-shelters” have been improved in some way as part of making it a permanent home. A site visit 2012 noted that most beneficiary families continue to live in their transformed transitional shelters. After ten years, some families are still making improvements leading to permanence, suggesting that the process of incremental housing development is both evident and likely to continue in the foreseeable future.
- **Transitional shelters have become “shophouses”**. As intended, many project beneficiaries have expanded their shelters to create space for livelihood activities of all kinds, thereby either restoring livelihoods lost in the disaster, or creating new economic activity using the shelter as a much-needed platform for production. This has contributed to both community and regional economic recovery since the volcanic eruption.
- **A deliberate focus on “Shelter and Settlements” is a critically needed approach to humanitarian assistance in urban areas**. Longer-term recovery was dependent upon regenerating its urban economy. Providing transitional shelter in the city, based on the “city-focused” approach, maximised and concentrated the economic benefits associated with investments made by the humanitarian community. In turn, residents have had better access to jobs and public services in an urban context than in a remote camp, contributing further to the recovery of their city. Disaster Risk Reduction measures were incorporated into the reconstruction of road and service networks, to enhance both evacuation options as well as access to land and housing markets. The city-focused approach orientated humanitarian assistance towards settlement planning and also reflected beneficiaries’ wishes to return to their own neighbourhoods.

- In Shelter Projects 2008, the implementing organisation noted:
  - For families with eight or more people, shelters were initially not big enough.
  - Some people felt that plastic walls compromised their privacy and security.

- The project was one of the first-ever attempts by the donor to promote an explicit shelter and settlements approach to shelter activities.
The volcano
(See case study A.1 in Shelter Projects 2008)

Nyiragongo, a volcano located approximately 16 kilometers (ten miles) north of Goma, the major town in Eastern Democratic Republic of Congo (DRC), began erupting on 17th January 2002. Lava flowed from the southern flank of the volcano, heading towards Goma.

This eruptive activity triggered an exodus of Goma, a city of approximately 450,000 people. Of which an estimated 300,000 people fled briefly to Rwanda, while others fled to settlements to the west of Goma as well as elsewhere within the DRC. Most people returned to the city within three months.

The lava flows and subsequent fires caused severe damage in Goma. An estimated 13 per cent of the city's 35km² land area was covered by lava. It heavily inundated the central part of the city, destroying up to 15,000 dwellings (20 per cent of the city's estimated housing stock). In inundating the most developed portion of the city, arguably the most developed portion of eastern DRC, the lava flows destroyed numerous economic enterprises and community structures, and thus thousands of livelihoods.

An estimated 90,000-105,000 people, many of whom were already vulnerable because of conflict-induced insecurity and limited economic opportunities, lost their homes and other assets, and were in need of shelter.

Although eruptive activity ended within 24 hours, seismic activity related to the volcano continued until early February 2002. On February 9 seismologists declared that the eruption was over.

Since early 2002, Goma has subsided by nearly 50cm. Minor subsidences have periodically occurred as a result of on-going tectonic activity.

Response
With thousands of jobs lost, and the urban and regional economy devastated, national and international organisations mounted a rapid response, with the international community contributing a total of US$ 40 million in assistance.

In this case-study, the donor's share of the contribution was nearly US$ 5 million. This included US$ 2.6 million in emergency relief: water, food, health, and non-food assistance (including blankets, household goods, and plastic sheeting); and a US$ 2.3 million programme featuring a transition-al shelter project and disaster risk reduction activities.

The response featured the design and implementation of one of the donor's first transitional shelter projects.

Recovery
After critical needs had been addressed, the humanitarian community began to develop strategies for helping residents of Goma rebuild their lives and livelihoods. Shelter quickly emerged as the most pressing need for affected families. People displaced by the volcano needed a place to call “home”.

Options for meeting this need included moving the entire city to a new site, dispersing people to different regions of the country, moving people into camps, and a “city-focused” option aimed at rehabilitating Goma itself, allowing as many people as possible to remain. These options were discussed at length among representatives of all key stakeholders.

The perceived and real security and political conditions in the immediate region affected decisions in shelter assistance by constraining relocation options to the east, north, and west of Goma. The city is also located on the northern shore of Lake Kivu, making large-scale southern movement of the displaced impractical.

There was also the local security consideration that many people wished to remain close to their former houses to prevent appropriation or looting.

Following consultations with affected communities and authorities, the donor devised a two-pronged strategy that would bring new life to Goma and reduce the impacts of future disasters.

Transitional Shelter
Due to the security, safety and economic concerns of the affected population, the first element of the programme was to support a city-focused transitional shelter program, devoting 80-85 per cent of program funds to the Goma urban area. The donor and its
partners determined that there was sufficient space in Goma to shelter residents there, and that the existing social and economic infrastructure, even post-eruption, made it easier to assist people in the city rather than elsewhere.

The donor funded a single organisation to provide shelter in Goma to assist 5,000 households. All of the households were assisted within nine months of the eruption. Other donors saw the efficacy of this strategy and provided a combined total of 8,000 additional households with transitional shelter. A further 2,000 households received other assistance from a variety of other organisations.

Assistance was used to expand or supplement host family homes, or build on under-used or vacant private residential parcels of land. Shelter supplies were sufficient to create 21m² of covered living space for an average beneficiary household of up to six people. The supplies included plastic sheeting, zinc roof sheeting, wood framing, and concrete screed flooring. A modest latrine was also provided.

Three-quarters of households were assisted on land occupied by host families (relatives or friends); many of these beneficiaries have remained on hosted land.

**Living with risk**

The second element of the strategy was rooted in the basic message of learning to live with risk: a Disaster Risk Reduction programme was designed to promote improvements in volcano hazard monitoring (provision of equipment, staff support, and technical assistance to the Goma Volcano Observatory).

The donor also sponsored a two-year, community-based Disaster Risk Reduction program linked to the Goma Volcano Observatory to enhance early warning systems, upgrade evacuation routes, and improve community awareness of what to do and where to go when eruptions and earthquakes occur.

The road network was expanded following discussions with local officials and representatives. This was intended to increase the number of evacuation routes.

**Outcomes**

Despite the considerable changes in Goma during the 2002-2012 period, including recent conflict in and near the city, several outcomes of the donor-supported post-eruption activities have become visible over time:

- In addition to providing much-needed shelter, the city-focused programme had a significant impact on Goma’s economy. Beneficiary families supported nearly 45,000 person-days of labour to transform their transitional shelters into permanent homes. This generated nearly 3,600 new jobs, and helped to jump-start economic recovery in Goma.
- Volcano monitoring is ongoing, with most of the equipment provided still functional, though upgrades are needed.
- The Goma Volcano Observatory continues to operate many community-based education activities, although updating is required. Activities include providing volcano activity reports to radio stations, sharing information at a local volcano information center, and updating alert levels in public areas.
- Over time, nearly all beneficiary families transformed their transitional shelter into permanent housing, resulting in the re-establishment of local markets and communities, contributing to overall recovery.

The rapid response to the 2002 volcanic eruption, the incorporation of Disaster Risk Reduction into the response, and the explicit shelter and settlements approach adopted were aimed at strengthening the resilience of Goma’s citizens by promoting recovery and lessening the impact of future disasters.

The 2012 assessment by this donor found that the activities that it supported have contributed to a transition to recovery and reconstruction. This outcome is notable, for it demonstrated the utility of using shelter as a means of promoting economic recovery and linking humanitarian community shelter activities to the process of longer-term permanent housing development. Furthermore, shelter activity was deliberately concentrated in neighbourhoods, where people wanted to resume their lives and livelihoods. It enabled people to learn to live with risk, supporting them with risk reduction activities.
**Case Study**

**DR Congo 2008-2016 / NFI Voucher Fairs**

**Key Words:** Non-food items, NFI voucher fairs, NFI distribution

<table>
<thead>
<tr>
<th>Crisis</th>
<th>Multiple conflicts / Complex, two decades long and ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total People Displaced and Returned&lt;sup&gt;1&lt;/sup&gt;</td>
<td>2.82 million people (new displacements in 2016: 922,000 people).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Locations</th>
<th>DR Congo, country wide.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voucher Fairs Beneficiaries&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3,950,530 persons (790,106 households) in the period 2009-2016.</td>
</tr>
</tbody>
</table>

| In-Kind Distribution Beneficiaries<sup>2</sup> | 4,471,250 persons (2009-2016). |


<sup>2</sup> The number of people is calculated on an average of five persons per household.

**Summary**

Since 2008, the NFI sector in the Democratic Republic of the Congo (DR Congo) has undergone a dramatic transformation from a response strategy dominated by in-kind distribution of basic household, personal and hygiene items, to the use of cash-based vouchers. The NFI voucher fair approach has allowed families to select items based on their own priorities, while also supporting local economies. By 2013, over 50% of all NFI beneficiaries in DR Congo were assisted using the NFI voucher fair approach. Since the first pilots in late 2008, local and international humanitarian actors have reached over 790,000 families – nearly 4 million people – using this approach. Organizations' staff explain the use and different values of coupons to beneficiaries before they enter the fair (Mutarule, South Kivu province).

**Total Number of Households Assisted with Voucher Fairs and In-Kind Distributions, 2009-2016**

<table>
<thead>
<tr>
<th>Year</th>
<th>NFI Distributions</th>
<th>NFI Voucher Fairs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>14,037 (16.4%)</td>
<td>74,360 (83.6%)</td>
</tr>
<tr>
<td>2010</td>
<td>174,776 (76.4%)</td>
<td>124,833 (53%)</td>
</tr>
<tr>
<td>2011</td>
<td>118,285 (38.1%)</td>
<td>113,260 (35.1%)</td>
</tr>
<tr>
<td>2012</td>
<td>153,073 (56.2%)</td>
<td>153,073 (56.2%)</td>
</tr>
<tr>
<td>2013</td>
<td>119,204 (43.8%)</td>
<td>119,204 (43.8%)</td>
</tr>
<tr>
<td>2014</td>
<td>60,954 (32%)</td>
<td>60,954 (32%)</td>
</tr>
<tr>
<td>2015</td>
<td>80,253 (43%)</td>
<td>80,253 (43%)</td>
</tr>
<tr>
<td>2016</td>
<td>75,656 (41%)</td>
<td>75,656 (41%)</td>
</tr>
</tbody>
</table>

**Strengths of the Fairs**

+ Beneficiary preference, as they choose their own items.
+ Reinforcing beneficiary dignity as actors in their own assistance.
+ Cost savings in logistics, transport and warehousing.
+ Supporting local economies.
+ Speed in setting up, when vendors are familiar with the approach.

**Challenges / Weaknesses**

- Smaller scale than in-kind distributions.
- Dependence on market capacity.
- Dishonest vendors can take advantage of beneficiaries.
- Lack of formal registration and tax documents can limit the participation of small vendors.
- Challenges in using the vouchers for some users.
BACKGROUND

For over two decades, the eastern provinces of DR Congo have been plagued by the humanitarian consequences of multiple conflicts, involving dozens of militia groups and government forces. Although often described as a protracted emergency, eastern DR Congo is characterized by a series of distinct, acute, crises, spread across a landscape of continually shifting zones of violence, displacement and insecurity, and areas of relative stability, where return and recovery are possible.

At the end of 2016, OCHA estimated that there were 2.2 million Internally Displaced People (IDPs) in the country; 922,000 of these people were newly displaced in 2016. Additionally, there were hundreds of thousands of returnees. Nearly 80% of displaced families lived in the homes and compounds of local host families who, although often extremely vulnerable themselves, are the first to provide assistance.

One of the most critical needs of families on the move is access to essential non-food items (NFI) to carry out daily activities. These activities include: clothing oneself, preparing and serving food, collecting and using water for washing and cleaning, carrying out livelihood activities, storing belongings and sleeping. The ability of displaced families, returnees and even some host families, to undertake these essential activities in dignity and security, is undermined by lack of access to essential items. NFI needs are particularly acute in conflict areas, where families flee with very few belongings and – although host families may share some of their resources such as food or cooking utensils – other items such as clothing and bedding are less likely to be shared.

NFI VOUCHER FAIRS

In 2008, some of the NFI actors in DR Congo began to look at cash-based options to meet the NFI needs of affected populations. This shift happened primarily for two reasons:

1) NFI needs of affected populations varied widely. Highly divergent and varied needs made the typical one-size-fits-all kit approach of standard NFI assistance less appropriate.

2) Markets were quite dynamic for imported and locally produced NFIs in DR Congo, and supply chains seemed robust, flexible and able to respond to increased demand.

Food security actors in DR Congo had been using seed fairs since the early 1990s. Based on this model, NFI actors began to conduct pilot NFI cash-voucher fairs.

HOW THE FAIRS WORK

The approach since the initial pilots is to invite beneficiary families to an organized, artificial, market place or “fair” (using the same targeting criteria as direct in-kind distributions). Each family receives cash-valued coupons – an average of USD 75 – which they can exchange for goods. A selected number of vendors – both larger wholesaler and smaller local traders – offer a wide array of NFIs for sale, just like in a regular market. The range of items can be as limited or unrestricted as determined by the organization managing the fair, who sets the “rules” on what items can be sold.

A typical fair includes dozens, even hundreds, of different types of NFIs – sandals to soap, clothing to locally produced cooking pots, foam mattresses to plastic basins, farming tools.

The initial choice of USD 75 for a family of 4-6 persons was based on the cost of items and transport of the recommended standard family NFI kit in DR Congo.

Vouchers are exchangeable at the fairs for selected NFIs, including locally made pots, clothing and blankets. Posters show photos and price ceilings of the most popular items (Mangina, North Kivu province).
Since the pilots, the NFI community in DR Congo has scaled up the use of the NFI voucher fair approach. Initially, humanitarian actors and the NFI-Shelter Cluster believed that while fairs were an innovative alternative to direct distributions, their scope would remain limited due to market capacity. This concern proved to be unfounded, as traders were able and willing to travel to remote areas to participate. They were also often more effective and resourceful than the best NGO logistics operations (renting small trucks, motorcycles, and even bicycles) in moving supplies to areas where a direct distribution would have been impossible. In addition, the smaller vendors often pooled resources to transport their merchandise to the fairs.

The NFI-Shelter Cluster actively promoted response analysis by informing programming by hosting multiple training and learning events, as well as by accompanying partners on the ground through “coaching visits”. Each year, provincial and national cluster coordinators and NGO co-facilitators conduct field visits to NFI fairs and the distribution sites of different organizations, to provide feedback and coaching on their activities. While direct distribution remains an essential part of NFI response in DR Congo, the Cluster has helped in training and supporting organizations to use the fair approach, reaching about 66% of families. This has resulted in a 30% increase in the number of families benefiting from NFIs.

SCALING UP

In the last few years, NFI actors have made significant progress in areas such as:

• Collaborating with food aid actors on joint NFI and food fairs;
• Improving market and purchasing pattern analysis to better determine an appropriate voucher value for affected zones, as well as to consider simultaneous distributions of certain items;
• Promoting inclusion of locally made NFIs;
• Integrating new technologies for improved data collection and analysis – particularly of purchasing patterns;
• Piloting the use of electronic vouchers;
• Setting fair price ceilings;
• Collaborating with food aid actors on joint NFI and food fairs.

Another, more recent, improvement (which some of the major NFI actors have adopted) is adjusting the value of the vouchers by family size. Instead of the standard USD 75 per family, these NGOs now have three different voucher values:

1) USD 55 for families of 1-3 persons;
2) USD 75 for families of 4-6 persons;
3) USD 90 and up for families of 7 or more persons.

Post-fair monitoring has shown significant improvement in NFI Score-Card vulnerabilities, by using this approach, compared to the standard one.

Some actors have started looking at the option of moving to direct cash to meet NFI needs. Purchasing pattern analyses of organizations using unconditional cash transfers typically reveal 40%-50% of cash being used on NFIs. While unconditional cash to address NFI needs remains an option to explore, it may not be the best in all settings. A 2010 study of 1,688 families revealed that, in terms of availability, over 66% of beneficiaries indicated that items they purchased at the fairs were not regularly available at the markets where they would typically purchase NFIs. Indeed, vendors travelling from significant distances of over 100km to participate in the fairs, are often providing a range of choice that families would not find in their local markets.

Vendors can sell multiple items based on an agreed list, and beneficiaries can haggle and discuss prices under a set ceiling (Kalele, South Kivu province).

NGO workers register vendors’ merchandise at the fairs to ensure quality and that no prohibited items have been brought (Aboro, Ituri province).
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

Driving the transformation was the recognition of the fair approach as a “win-win-win”: for affected people, for humanitarian organizations and for the local economy.

+ Beneficiary preference. Monitoring visits with assisted families have shown a significant preference for fairs over distributions. Having choice over one’s own assistance reinforces the dignity of beneficiaries, and was continually cited as an overwhelming advantage of the fairs. The concern that vendors might not be able to provide the quality and quantity to meet needs proved unfounded. In the same 2010 study of 1,688 families beneficiaries stated that 96% of items bought at the fairs were of very good or acceptable quality.

+ Cost savings. With savings on logistics, transport, and warehousing, the fair approach is cheaper per family than an in-kind distribution. It also reduces the risks for implementing organizations, who are no longer responsible for the warehousing and security of NFIs before and during distributions. Recognizing the value for the beneficiaries of dignity and choice, as well as the value for money of their contributions, donors were also a catalyst behind the transformation. Humanitarian donors in DR Congo no longer accept proposals of a traditional distribution approach, if the organization has not demonstrated why a cash-based approach is not possible.

+ Local economy. Thousands of local traders and producers of locally made NFIs have benefitted from participating in the fairs. Since the first pilots in late 2008, over USD 59 million has been injected into the local Congolese economy, by organizations using the fair approach. Monitoring with vendors shows how this secondary “impact” of fair programmes has created new employment, opened markets in new areas, and increased the capital and diversified merchandise of local traders.

+ Speed. As the fair approach became more common, humanitarian organizations were also able to increase the speed of implementation, particularly in areas where they were able to draw upon vendors with previous experience in fairs. As of 2016, vendors in some areas were able to access NFIs for fairs and organize their logistics within less than a week (this can take up to three weeks in cases where vendors are not familiar with the fair approach).

CHALLENGES AND LEARNINGS

- Scalability. One important limitation of the fair approach is the scale. Experienced organizations can do a fair for up to 700 families in a day. This mainly depends on the time families are allowed to “shop” and the need to count the vouchers that vendors received, at the end of the day. Fairs normally happen between 10am and 3pm for these two reasons. Organizations usually do 3-4 days of fairs in a row, depending on the number of families to be reached. A well-organized distribution, on the other hand, can reach two to three times as many families in a day. Therefore, NFI distributions are still an essential part of the response in DR Congo – particularly for large-scale interventions, or in new areas, where there are few vendors with experience in the fair approach.

- Market capacity. While the dynamism and reach of the markets in DR Congo has surpassed expectations, there are areas where markets are not able to provide the quantity, scope, and quality of items needed. Strong market and response analyses are needed to enable NFI actors to choose the best modality between fairs, distributions, or a combination of the two.

- Dishonest vendors. Vendors may attempt to take advantage of beneficiaries, despite agreements and monitoring by staff, by not respecting price ceilings, or working with other vendors to fix a price and not allowing beneficiaries to negotiate.

- Smaller vendors. Local / smaller vendors, local producers and artisans sometimes do not have the legally required registration and tax documents. This can be mitigated by encouraging vendors who do have all their registration papers with authorities, to team up with smaller vendors and producers of locally made NFIs, to sell these items at their stands.

- Restricted items. There has been much discussion on when and how to put limitations on the types of items permitted at fairs, or whether organizations should set price caps on certain items, so as to ensure that they remain focused on basic needs – for example permitting items such as shoes, but not shoes which are priced over a certain amount. Monitoring has shown that families tend to spend vouchers on the same types of items as those found in a standard NFI kit. However, questions are raised on whether items like radios, plastic chairs, or small solar panels can be considered essential household NFIs. While the Cluster has developed some guidance, it ultimately remains an issue for each organization to examine with their donors and the communities they are serving, in consideration of the objective of their programme.

- Use of the vouchers. A small minority of beneficiaries have reported having difficulties in using the vouchers. This is particularly true for the elderly, or illiterate. It is critical to ensure that these beneficiaries are encouraged to come to the fairs with someone who can assist them. The organization should also have workers who can help accompany such beneficiaries at the fairs. The learning in DR Congo has been that there is never too much education and information sharing about using the vouchers.
KEYWORDS: Emergency shelter, NFI, Vulnerability scorecard, Local construction techniques

CRISIS
Kasai conflict, January 2017–onwards

PEOPLE IN NEED*
870,000 in Kasai province and 3.8 million in the whole of Kasai region, as of Dec 2017

PEOPLE WITH SHELTER NEEDS
83,740 in Kamuesha health zone. 4.7 million in the whole country*

PROJECT LOCATIONS
Two villages in Kamuesha health zone, Kasai province

PROJECT BENEFICIARIES
630 households (3,150 individuals, 60% female and 158 individuals with disabilities. Including 40% returnees and 10% host families)

PROJECT OUTPUTS
200 shelters built via conditional cash grants
630 NFI kits distributed
4 training sessions on shelter construction

SHELTER SIZE
20m²

SHELTER DENSITY
4m² per person on average

MATERIALS COST
USD 140 for the shelter
USD 120 for the NFI kit

PROJECT COST
USD 360 per household (shelter + NFI kit)
USD 164 per household (NFI kit only)


The project provided non-food items kits to 630 displaced, returnee and host community households and built 200 shelters for the most vulnerable amongst them using local designs and materials. Shelter solidarity committees were established to oversee the design and construction process, which was driven by the affected households themselves. Vulnerability scorecards were used to prioritize beneficiaries based on NFI and shelter materials conditions, combined with additional socioeconomic and vulnerability criteria, designed together with the community.

STRENGTHS
+ Use of local materials, house typology and construction techniques.
+ Cash was injected into the local economy.
+ High involvement of the community.
+ Effective targeting process.
+ Gender mainstreaming and women’s empowerment.

WEAKNESSES
- The project mistakenly assumed that community members would help new arrivals.
- Limited capacity and experience in cash-based interventions.
- Communication challenges with armed actors and the communities.
- Shelters were built without latrines.
CONTEXT IN KASAI
Against a background of insecurity and protracted displacement in the Democratic Republic of the Congo, tensions in 2016 over the recognition of traditional leaders led to an escalation of conflict between the national army and local militia in the Kasai region. About 1.4 million people were displaced in the first half of 2017 across the region. In October 2017, a six-month system-wide Level 3 emergency was declared to respond to the scale of the crisis in the country.¹

SHELTER NEEDS
Shelter and Non-Food Items (NFI) were identified amongst the key priorities in multisectoral assessments conducted in Kasai province. Despite the acute needs, the Shelter-NFI Cluster remained the most underfunded sector in the country in 2018 (less than 10% funded).² Only 36 per cent of the people were reached by March 2018 and very few humanitarian partners were implementing shelter activities.³

NATIONAL SHELTER STRATEGY
The shelter working group strategy in early 2018 centred around four main interventions:
- Collective centre upgrades (USD 50 per household);
- Emergency shelter kits for displacement sites (USD 120 per kit/household);
- Conditional cash support for families hosting IDPs who cannot return (USD 120);
- Materials distribution and/or conditional cash transfer to support return (max USD 450).⁴

The working group advocated for inclusive processes, focusing on capacity-building and owner-driven construction, as well as the use of local materials and housing typologies.

VULNERABILITY SCORECARDS
A scorecard approach was used in the country to target beneficiaries given the acute gaps between needs and available resources. Developed in 2007 within the NFI Cluster, the approach initially used a ranking from 0 (no need) to 5 (extreme vulnerability) based on set criteria. For shelter, the scorecard was developed in 2014. Criteria for each household were selected from drop-down lists in a spreadsheet that calculated the final scores.

Criteria were grouped into five categories:
- Humanitarian situation (see opposite table);
- Density / privacy within the shelter;
- Location (incl. tenure arrangement);
- Roof conditions; and
- General shelter conditions (incl. foundations and walls).

Depending on the conditions of each household, criteria were assigned a score representing the severity of the vulnerability. Scores for the criteria in a given category were then multiplied and weighted. The average amongst the five categories was taken to represent the shelter vulnerability of each household.

³ The revised methodology as of Nov 2018 is available at https://sheltercluster.org.

EXAMPLE OF SCORES USED IN THE PROJECT WITHIN THE HUMANITARIAN SITUATION CATEGORY

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Criteria options</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displacement status</td>
<td>Internally displaced / Refugee / Disaster-affected</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>Returnee / Local non-displaced, host family</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>Local non-displaced, not vulnerable</td>
<td>2.50</td>
</tr>
<tr>
<td></td>
<td>Local non displaced, vulnerable</td>
<td>3.80</td>
</tr>
<tr>
<td>Protection incident</td>
<td>GBV / Fire / Damaged and looting</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>No violence</td>
<td>1.00</td>
</tr>
<tr>
<td>Special needs</td>
<td>Female headed / Child headed / Elderly / Disability / Chronic illness</td>
<td>0.50</td>
</tr>
<tr>
<td></td>
<td>No special needs</td>
<td>1.00</td>
</tr>
<tr>
<td>Time factor</td>
<td>0–3 months without shelter / new displacement</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>3+ months without shelter</td>
<td>1.25</td>
</tr>
<tr>
<td></td>
<td>0–6 months with emergency shelter</td>
<td>1.50</td>
</tr>
<tr>
<td></td>
<td>6–12 months with emergency shelter</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>12+ months with shelter</td>
<td>2.50</td>
</tr>
<tr>
<td></td>
<td>10+ CGI received / kit / transitional shelter</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td>Less than 10 CGI received / NFI kit</td>
<td>2.50</td>
</tr>
</tbody>
</table>

EXAMPLE: For a returnee household, with no incident of violence, no member with special needs, that has been for over three months without shelter, the score for the humanitarian situation category is calculated as follows:

$5 / (1.25 \times 1.00 \times 1.00 \times 1.25) = 5 / 1.56 = 3.2$

BENEFICIARY SELECTION
The organization applied additional vulnerability criteria to the Cluster scorecard. This reflected a focus on specific vulnerabilities, including safety, gender, age and disability related. A team of five enumerators was employed to conduct the initial assessments. In the target areas, the organization identified average scores of 4.8/5 for shelter and 3.8/5 for NFI. IDPs, returnees and host community members were all targeted.

The selection process was conducted in consultation with local community leaders and affected people to reduce tensions over the prioritization, including the definition of the selection criteria. Some issues did arise due to beneficiaries trying to register multiple times, or people who were not targeted claiming to be eligible. However, these issues were generally addressed by continuous communication with community leaders and the establishment of committees to address complaints, which were composed of local leaders, displaced and returnee community members, as well as field staff from the organization.

The scorecard approach was also used after project completion, to measure the impact of the intervention over the shelter vulnerabilities of beneficiaries. Scores decreased to around 2.5 for shelter and 2 for NFIs.

The scorecard methodology was revised in 2018 after this project ended, to adjust some of the criteria and adopt a scoring system from 1 to 20 to have a more nuanced disaggregation of the distinct levels of household shelter vulnerability.⁵

³ NFI and Shelter Cluster Factsheet March 2018.
⁴ The strategy is available at https://sheltercluster.org.
⁵ The revised methodology as of Nov 2018 is available at https://sheltercluster.org.
PROJECT IMPLEMENTATION

The project provided NFI and shelter support to 630 and 200 households respectively. It was implemented by a team of nine staff from an international organization, supported by 18 occasional workers for the distributions.

The shelter component was implemented using conditional cash grants distributed in three tranches using mobile money transfers. For those who did not own a phone, cards redeemable at any transfer shop were distributed. The first tranche (40%) was transferred after the completion of the foundations, the second (40%) after the walls were completed and the third (20%) once the roof was constructed. Following an owner-driven approach, selected households were responsible for the collection of materials and the construction of the shelters, with the support of a team of four engineers from the organization.

Shelter committees or “solidarity groups” were formed from the beneficiaries to oversee the process, each representing 18–20 households. Each committee was composed of five people (generally three women and two men) and was responsible for organizing the procurement, transport and storage of local building materials, supervising construction and supporting vulnerable households where needed. It was found that women were more engaged than men (even though housing construction is traditionally an activity conducted by men), which explained why more women were represented in the committees.

Four trainings on shelter construction were conducted by the organization at the start of the project, to provide the committee members and local community (100 individuals in total, including local authorities and village leaders) with the skills needed to build safe structures and support new arrivals and the wider community in the future. Construction tools were distributed to the committees after the trainings. The tools allowed people not directly targeted by the project to also conduct repairs to their damaged homes. Awareness sessions on health, environment and gender were also conducted in the targeted communities.

After the construction was completed and shelters handed over to the beneficiaries, distributions were organized for the household NFI kits to the larger group of 630 households.

COMMUNITY ENGAGEMENT

The solidarity groups were set up with the intention of supporting most vulnerable houses in the construction process and train new arrivals on the construction techniques learned. However, it was later found that only two per cent actually did help new arrivals. This was mainly due to other daily priorities such as collecting food or, to a lower extent, taking care of small businesses.

The committees nonetheless played a vital role in defining the shelter design, requesting for additional space, two separate rooms and a covered veranda for cooking in the front. The design had to be modified and presented to the national Cluster twice before the community agreed on the size and layout.

Women had a lead role in collecting local materials, such as sticks, ropes, palm leaves, soil, reeds, etc., while men often prepared the materials before construction. Both men and women shared the tasks of building or rehabilitating shelters.

Given the lack of experience of the organization in cash-based shelter interventions, as well as the novelty of the approach within the targeted communities, in the beginning there was confusion amongst beneficiaries as to how activities would be implemented. Continuous communication and the signing of an agreement between the organization staff and the beneficiaries, outlining roles and responsibilities, helped overcome these issues.

Shelters were cost-effective, as materials were locally available and labour was provided by the affected families themselves.
SHELTER DESIGN

The shelter was designed based on local construction techniques and available materials, mainly a wattle and daub or mud-brick structure with thatched roof. On one hand, this allowed a smoother implementation, as target households had access to the local markets where the organization did not, and ensured that the cash was injected into the local economy. On the other, it also helped mitigate the risk of tensions with surrounding host communities, as the housing typology and size was very similar to the existing conditions in the area. The simple layout included a shaded veranda for cooking and storage, connected to a living area, and an additional sleeping space only accessible from the living room.

COORDINATION

Activities were coordinated with and monitored by the sub-national Shelter-NFI Working Group, which conducted several visits to the project sites. Collaboration with other humanitarian partners ensured harmonization and complementarity of the response. Coordination with local authorities was essential to guarantee security and access, as well as in the harmonization of needs assessments.

MAIN CHALLENGES

Access was a major challenge during military operations, so adopting a people-driven approach improved implementation, as often the organization could not reach project locations.

Tensions between two target villages escalated after the killing of one village chief. The establishment of solidarity groups from the two communities and the training on construction helped reduce these tensions and re-establish dialogue between the neighbouring groups.

The presence of military forces and militia in the area also caused issues when prioritizing beneficiaries, as both armed groups had relatives in the target areas and requested assistance. It took significant efforts and several briefings with both groups to explain the humanitarian principles behind the intervention and be allowed to proceed with an impartial selection.

WIDER IMPACTS OF THE PROJECT

The training to the local community enabled to reach a wider group, also thanks to the distribution of construction tools. This, combined with the use of local materials and techniques, allowed others to replicate the interventions in the area.

The addition of a covered veranda to the design had the advantage of reducing indoor cooking practices, which reduced health and fire hazards. More households in the area also started to apply the veranda to their shelters.

Materials List for One Shelter

<table>
<thead>
<tr>
<th>Kit</th>
<th>Items</th>
<th>Total cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walls</td>
<td>Sticks and reeds</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td>Rope</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mud and mud mortar</td>
<td></td>
</tr>
<tr>
<td>Frames</td>
<td>Sticks and reeds</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>Rope</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bamboo</td>
<td></td>
</tr>
<tr>
<td>Roof</td>
<td>Thatch or straw</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>Palm leaves</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rope</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plastic sheet</td>
<td>15.00</td>
</tr>
<tr>
<td>Door and windows</td>
<td>Door, 86x90cm</td>
<td>52.00</td>
</tr>
<tr>
<td></td>
<td>Windows, 40x40cm / 40x50cm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hinges</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Padlock and lock</td>
<td></td>
</tr>
<tr>
<td>Shared community toolkit (two for each 20 households)</td>
<td>Measuring tape</td>
<td>48.00</td>
</tr>
<tr>
<td></td>
<td>Handsaw</td>
<td></td>
</tr>
<tr>
<td></td>
<td>String</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mason square</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spade</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hoe</td>
<td></td>
</tr>
</tbody>
</table>

Communities actively participated in the design process. Thanks to their inputs, the shelters were expanded and a shaded veranda was added.

Shelter solidarity committees were formed and trained to conduct construction activities. After the training, they were given construction tools to be shared.

Other members in the communities were observed replicating some of the features and techniques proposed in this project, such as the outdoor veranda for cooking.
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

Women had a leading role in collecting materials and during construction of shelters, challenging traditional social norms.

STRENGTHS

+ The use of local materials, housing typology and construction techniques – coupled with training – allowed to keep the costs low, minimize negative effects on the environment and ensure replicability.

+ The injection of cash into the local communities led to the creation of new businesses.

+ High involvement of the community and the selected households throughout the project (incl. selection and construction).

+ Effective targeting by combining the sector scorecard approach with additional vulnerability criteria defined together with the community.

+ Gender mainstreaming. Women were empowered in taking roles traditionally held by men, awareness raised on gender and reproductive health issues, and women and girls supported with distribution of hygiene kits.

WEAKNESSES

- The project mistakenly assumed that community members would help new arrivals, while findings showed that only two per cent actually did.

- The organization had limited capacity and experience in implementing cash-based interventions, which led to communication challenges and confusion with the communities at the start.

- Several communication challenges with armed actors and the communities themselves arose during the implementation. Although community briefings were conducted and a complaints system was set up, these issues could have been better addressed with clear communication from the outset.

- Shelters were built without latrines, as activities were not coordinated across sectors within the organization.

LESSONS LEARNED

• The organization started working more closely with the solidarity groups to improve their role in supporting vulnerable households in future projects.

• Shelter-NFI and water and sanitation interventions should be implemented jointly.

• The use of owner-driven approaches, local materials and house designs allow for higher sustainability and cost-effectiveness, especially when people can access local markets.
A.5 Liberia- 2007- IDPs, refugees
Self-build shelters

**Project type:**
- Community mobilisation
- Self-build shelters
- Materials distribution
- Cash payment for materials and labour
- Technical support for improved design

**Emergency:**
Liberian returnees, 2007

**No. of houses damaged/people displaced:**
A 2005 needs assessment estimated 80% of the housing stock was damaged. In total, around 500,000 of Liberia’s population of 3 million had been displaced by civil war.

**Project target population:**
500 individual shelters in Cape Mount, Bomi and Gbarpolu counties, benefitting 1,328 beneficiaries.
Post-completion, a total of 1,782 people were living in the houses as family members and lodgers moved in.

**Occupancy rate on handover:**
100%

**Shelter size**
25m² (5m x 5m)

**Summary**
Shelter assistance to vulnerable returnees (IDPs and refugees). Building materials were provided and cash incentives were given to communities for construction. The agency provided technical support and close project monitoring in collaboration with the community.

**Project timeline**

**Strengths and weaknesses**
- X Selecting beneficiaries in collaboration with the community ensured community cooperation.
- X Close partnership with local authorities through several initial open meetings meant that what was and was not covered by the project was clearly understood.
- X A good balance between community decision-making and quality control was achieved through close monitoring of the project by the agency. This helped to minimise corruption.
- X Learning from previous projects, enough supervisors were employed to ensure that they had a face-to-face meeting with each beneficiary once a week.
- X Paying for materials and labour only after the materials had been used in construction and the beneficiary had moved in ensured work was completed on time and that the right people benefited.
- X Using a local design meant that local people knew what they wanted to build and how to build it.
Strengths and weaknesses (continued)
- The project ran alongside water and sanitation and education programs, which was necessary to ensure that people had access to the services they needed in order to resettle.
- The construction of shelters for vulnerable beneficiaries appeared to inspire other returnees to begin rebuilding spontaneously, as it created a positive atmosphere of recovery.
- The project was better suited to a rural context than an urban one, as community mobilisation was much easier in smaller villages where the benefits to the whole community could be more clearly seen.
W Maintenance issues could have been considered further, with many beneficiaries asking for cement for flooring and walls.
W Technical supervision could have been more intensive from the beginning, as some construction work had to be rectified.
W Donor-driven partnerships with community-based organisations from previous projects had to be dropped due to corruption and a lack of community involvement.

Situation before emergency
After years of civil war, many of Liberia’s 3 million inhabitants had been displaced within or outside of the country. Between 2004 and 2007, 327,000 IDPs were assisted in a returns process, leaving an estimated 23,000 in camps. Over 110,000 refugees returned at the same time. Around 90,000 Liberian refugees remain outside of Liberia, making the total figure of those displaced over half a million.

It is estimated that the number of people living on less than one dollar per day rose from 55% in 1997 to 80% in 2007. As well, the sanitation and nutrition conditions of the early 1990s had seriously deteriorated by 2004.

After the emergency
The vast majority of returnees did not have appropriate shelter when they returned, due to their houses being destroyed or simply deteriorating during the two civil wars.

In rural forested areas, building traditional shelters required families to collect materials and provide the labour to rebuild. While some support was provided for rebuilding (such as this project), most returnees’ shelter assistance did not extend beyond the standard repatriation package (sleeping mat, blanket, cooking kit, food and transportation) issued in the return-transit camp.

Selection of beneficiaries
Using the opportunity of a routine check of returnee names, the agency made notes of those living in overcrowded shelters and poor conditions before communities were aware of a proposed shelter programme. This eliminated the temptation for people to temporarily overcrowd their shelters on assessment day. By correlating this information with a joint UN/NGO monitoring project to establish vulnerability categories (including female-headed households, unaccompanied minors, the chronically ill and physically disabled) the agency was able to draw up a shortlist of potential beneficiaries.

The final selection of 500 beneficiaries was carried out by the agency, in collaboration with local authorities and community representatives, after several visits and open meetings. Three-way Memorandums of Understanding, describing the assistance given and the criteria for beneficiary selection, were prepared and signed by beneficiaries, community leaders, and agency representatives.

Technical solutions
The traditional house design is a bush pole-framed, mud-walled construction with a thatched roof of grass or palm leaves. The project improved the design to include a corrugated iron roof, which reduced the need to maintain a thatch roof, and a stronger central pole to improve structural stability.

Many local houses do not have closable doors and windows, and walls and floors have to be frequently repaired after damage from the elements. As vulnerable beneficiaries were unlikely to be able to undertake much maintenance themselves, doors and windows were included in the build.

“I now have a good place to stay, and my family will come to stay with me in my new home”.
– Beneficiary
Strengths and weaknesses (continued)

After the emergency this project, most returnees' shelter was provided for rebuilding (such as labour to rebuild. While some support traditional shelters required families being destroyed or simply deteriorate not have appropriate shelter when had seriously deteriorated by 2004.

returns process, leaving an estimated 2007, 327,000 IDPs were assisted in a of the country. Between 2004 and had been displaced within or outside Liberia's 3 million inhabitants had been settled.

A.5 Africa Shelter Projects 2008

Implementation

Once beneficiaries had been selected and cooperation of the community was agreed upon through a series of open meetings, a skilled local carpenter was chosen to lead the construction of between one and three houses. The carpenter would also act as a community mobiliser to organise people to collect materials and provide labour for construction.

Progress was monitored by one of five shelter supervisors, all of whom had construction knowledge and skills. The supervisors were managed by a shelter coordinator and a project director.

Supervisors were expected to visit each beneficiary at least once a week. The coordinator usually visited sites four days a week. Such close and direct monitoring was a key reason for the project’s success, as problems were identified and resolved quickly and the quality of building could be examined throughout the project. This enabled ongoing improvements to be made.

The NGO paid US$ 40 for the materials collected to build the house and US$ 40 for the labour. This was not a salary, but an incentive. The community decided who would benefit from the money; normally it was used to pay for the food of those who provided labour.

The sum was large enough to be an incentive to get people involved, but small enough to prevent conflict over who benefited. The US$ 40 for the materials was only paid once construction up to the roof was completed.

Payment of the final US$ 40 was made upon occupancy rather than when the structure was completed. This was a lesson learned from previous projects, where payment had been made upon structural completion. The NGO was then unable to prevent occupancy of the structures by non-beneficiaries afterwards.

Shelter supervisors marked out the agreed 25m². A standard design was proposed for a two-room construction with a veranda. However, beneficiaries were free to alter this design according to their needs. The NGO felt it necessary to make further stipulations about central support poles, to ensure that the building was safe once the project was underway.

The project was completed on time with a 100% occupancy rate.

Land issues

The community allocated the land themselves. This was easy in rural areas and small communities, where there was no pressure on land. In more densely populated communities (though not urban) land had a price. In these areas the NGO had to check the site selection as there was a temptation to allocate land to vulnerable beneficiaries that was inappropriate for building. This was solved through joint meetings with the local authorities and community representatives.

Logistics and materials

Materials were collected locally, apart from doors and windows. It was not thought that environmental damage would be caused by local collection. The total cost of materials for each shelter was US$ 320 (US$ 240 for imported materials, US$ 40 for local materials bought from communities, and US$ 40 for labour provided by the community).

<table>
<thead>
<tr>
<th>Materials collected locally:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central pole</td>
</tr>
<tr>
<td>Poles for frame</td>
</tr>
<tr>
<td>Rafters (poles)</td>
</tr>
<tr>
<td>Bamboo/rope for ceiling mats</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Materials</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3” nails</td>
<td>65 (0.3kg)</td>
</tr>
<tr>
<td>4” nails</td>
<td>28 (0.3kg)</td>
</tr>
<tr>
<td>Hammer</td>
<td>1</td>
</tr>
<tr>
<td>Zinc roofing sheets</td>
<td>2 bundles</td>
</tr>
<tr>
<td>(0.66m x 2.4m)</td>
<td></td>
</tr>
<tr>
<td>Zinc nails</td>
<td>1.5 packets</td>
</tr>
<tr>
<td>Door and frame</td>
<td>2</td>
</tr>
<tr>
<td>Window and frame</td>
<td>2</td>
</tr>
<tr>
<td>Hinges</td>
<td>4 pairs</td>
</tr>
<tr>
<td>Nails</td>
<td>115 (0.3kg)</td>
</tr>
<tr>
<td>Hasp/staples</td>
<td>4 pairs</td>
</tr>
<tr>
<td>Window and door</td>
<td>4 pieces</td>
</tr>
<tr>
<td>bolts</td>
<td></td>
</tr>
<tr>
<td>Roofing felt</td>
<td>1 piece</td>
</tr>
</tbody>
</table>

www.shelterprojects.org
**A.12 Liberia - 2007- IDPs, refugees**

**Case study:**

**Project type:**
- Community mobilisation
- Self build
- Materials distribution
- Cash payment for materials and labour
- Technical support for improved design

**Emergency:**

**Houses damaged:**
Estimated 80% of housing was damaged.

**Number of people displaced:**
Approximately half of a million of Liberia’s 3 million population was displaced by the civil war.

**Project target population:**
500 individual shelters in Cape Mount, Bomi and Gbarpolu counties, benefitting 1,328 beneficiaries. After completion, 1,782 people were living in the houses as family members or lodgers.

**Occupancy rate on handover:**
100%

**Shelter size**
25m² (5m by 5m)

**Summary**
Shelter assistance for vulnerable returnees (IDP and refugees). Building materials were provided and cash incentives given to communities for construction. The agency provided technical support and close project monitoring in collaboration with the community.

**Update**
Liberia’s reconstruction continues to be challenging, with on-going displacements of small numbers of people due to land-ownership conflicts. By the end of 2008, displaced people who had found shelter in public buildings remained unregistered and subsequently excluded from official assistance. Many people returned to the areas of their former area of displacement due to the lack of services available in return areas.

In this programme, shelter maintenance has been a problem post-completion – both in terms of beneficiaries’ physical/financial ability to maintain shelters (45% are classified as having no external help) and the durability of materials used. However, the occupancy rate remains high – 95% of the shelters are occupied by the original families, and they continue to rate the project achievements highly.

In a project review, it was recommended that future similar projects should:
- include a follow-up monitoring budget
- consider use of more durable materials (such as a cement floor)
- provide basic furniture such as beds (as some people are sleeping on floors)
A.17 Nigeria – 2012 – Floods

Case study

Emergency: Floods, Nigeria.
Date: August – November 2012.
Damage: 26,801 houses damaged.
People affected: 422,691 affected, 256,767 displaced.
Project location: Kogi State (North Central Zone).
Beneficiaries: 100 households.
Outputs: Support for 100 shelters.
Occupancy rate: 55% (beneficiaries have chosen to upgrade the houses with cement block walls and are waiting until after 2014 harvest to do so).

Project description:

The project aimed to support people affected by flooding, reducing their shelter and settlement vulnerabilities. Emergency shelter/NFI kits were distributed followed by a recovery project to support families with rebuilding their shelters using safer construction techniques.

Emergency timeline:

[a] August 2012: flooding begins, lasting four months.
Project timeline (number of months):


Strengths

✓ Artisans, project supervisors, community members and volunteers were trained on housing improvements.
✓ Effective community participation in the beneficiary selection process resulted in good cooperation and acceptance of the project in one area.
✓ “Lessons learned” workshops were attended by national and local authorities who had been involved from the beginning. University experts suggested by the technical expertise partner were also involved.
✓ The improved shelter design has been replicated by other community members outside of the project.

Weaknesses

✗ Initial communication/language barriers were only overcome later in the project once local volunteers were recruited to help.
✗ In Odogwu, people were not used to being involved in projects employing a participatory approach. As a result, a lack of proper sensitisation led to lack of understanding of the project by the beneficiaries.
✗ Weekly payments, rather than payments for progress, meant poorly-performing construction supervisors were difficult to manage.
✗ A planned “consolidation phase” to reinforce national team implementation capacities was dropped after the quantitative results of the project were achieved. It is hoped that the implementing organisation will be able to replicate the project and adapt it to different contexts even without this formal phase.
Situation before the disaster

Many of those affected by the flooding were living in poor quality housing conditions. Houses were too close to the river bank. Many were simple mud houses, in bad condition and without concrete foundations. This meant that the houses had very little structural resistance against flooding.

Situation after the disaster

Most people affected by the disaster sought refuge in schools and abandoned buildings, with poor sanitation facilities, a lack of safe drinking water and inadequate space.

Beginning in August 2012, the floods spread until November and many people remained in temporary shelter until March 2013.

Kogi state was the worst-hit, due to the confluence of two major rivers in the state (Benue and Niger), both of which contained excess water released from dams in Cameroon and Nigeria.

Shelter strategy

There was no specific national strategy at the beginning of the crisis, though the Emergency Shelter and NFI Sector was later activated by the National Emergency Management Agency (NEMA) and the Shelter sector lead.

Project implementation

Following a state-wide assessment, three communities in Kogi state were selected for support: Mozum Ose (40 households), Ozahi (30 households) and Odogwu (30 households).

The project had three main components:

- NFI distribution.
- Construction of durable and flood resistant shelter.
- Training on safer and stronger construction techniques.

The project also had a WASH component conducted by a separate team, which included hygiene promotion activities and the construction of latrines.

The NFI distribution was made up of shelter toolkits and two tarpaulins, blankets, mosquito nets, buckets, laundry soap, kitchen sets, sleeping mats and aqua tabs.

The recovery programme then began in January 2013, with a strong community participation method.

Following sensitisation visits to the communities (provided in their local languages through local volunteers for the organisation) and the completion of the selection of beneficiaries, safe plots were identified.

Some beneficiaries were relocated further away from the river banks and allocated new land to build better houses. The organisation worked with local government authorities to ensure that beneficiaries received a Customary Right of Occupancy.

Construction

The organisation provided support to build the structure and roof for the new houses, with beneficiaries required to complete the walls themselves.

The community also provided the labour for excavating the foundations, and provided the water and sand required during the construction process.

Training

Trainings on Disaster Risk Reduction (DRR) building techniques were conducted in the communities, targeted at both community members and volunteers from local voluntary organisations.

The training was conducted by a team made up of the organisation’s own shelter experts, the organisation’s technical partner, and a university-based expert. The training focussed on improved roof-fixing methods, constructing a damp course, and bracing techniques.

The project maintained continuous communication with the communities in order to elicit ongoing feedback, and participation from communities in Mozum Ose and Ozahi was particularly good. Odogwu proved to be much more challenging, and despite continual explanation, the organisation was unable to get the community leaders to understand that it was not representing the government and was not planning to carry out all the building activities directly.

Only half of the shelters were completed during the project’s lifetime. This is due to the fact that beneficiaries needed to know what their budget would be for their planned self-upgrading of their houses (beyond the materials supplied by the organisation) once they had sold their produce after the harvest.

In the meantime, they remained in makeshift shelters.

Beneficiary selection

Beneficiary selection criteria was defined by the organisation as being households who met one or more of the following criteria:

- House completely destroyed or damaged by floods.
- Single-parent headed household.
- Child-headed households.
- Households with elderly, disabled, or chronically ill family members.
- Households with a monthly income below 20,000 naira (US$120).

The beneficiary criteria were explained to the communities during the community meetings, and the
community leaders selected the households that met the criteria in open meetings.

A beneficiary verification was carried out in early January 2013, to verify that the households selected by the communities met the beneficiary criteria.

**Coordination**

The organisation worked with several government authorities, including the National Emergency Management Agency (NEMA), the State Emergency Management Agency (SEMA) and the Local Emergency Management Agency (LEMA).

To secure land rights, the organisation had to contribute to the costs of land titles in the Odogwu community.

**Shelter design**

The architectural design for the emergency recovery shelters was based on a local two-room house with a four-pitch roof consisting of building foundations, five-courses cement block walls, corrugated iron sheets, and cement floors.

Due to different traditional construction practices in the communities, two shelter designs were employed, with each one taking local construction knowledge and adding DRR improvements.

**Mozum Ose and Ozahi communities**

The permanent shelter design provided an 18m² covered living area, with walls to be completed by beneficiaries.

The foundations were made of rammed sand and cement (10%) while the first five courses of the walls were built with cement blocks, following the current vernacular style.

If beneficiaries completed the walls with mud bricks then they were shown how to add a Damp Proof Course (DPC) to protect the bricks. Some beneficiaries completed the walls with cement blocks, even though these were more expensive.

The roof was made of a wooden frame covered in corrugated iron sheets and supported by wooden columns and beams. This made the roof independent from the walls.

To prevent column bases from rotting, they were placed on small concrete or sand columns. In this way, if mud wall bricks fail in a flood, the roof will not collapse and this technique is already employed by some of the local population. Bracings were added to improve stability.

**Odogwu community**

Following individual assessments of each house, two different types of shelter support were planned.

Type A involved two phases. The first phase involved providing cement and gravel for foundations and timber, plastic sheeting, and nails for the structure. The second phase involved the provision of corrugated iron sheets for the roof.

In between the two phases, the beneficiaries built up the walls between the columns using a frame of wooden poles and bamboo plastered with mud. The final covered living area is 27 m².

Type B did not receive any roofing materials. Instead, these families were supported with cement blocks to protect the base of the house and cement for plastering the walls.

**Disaster Risk Reduction (DRR)**

Improvements to construction techniques to enhance flood and storm resistance were demonstrated using physical examples of foundations and walls erected within communities using local materials.

Special emphasis was placed on securing the timber structure to the roof and foundation. The timber columns were placed on top of concrete pier foundations and secured with metal bands, whilst the roof structure was secured to the columns with storm-straps, locally called “langa-langa”.

Those communities employing a waterproof plinth (using Concrete Hollow Blocks) were educated about the capillarity characteristics of materials, and how this can be prevented using a damp proof course in the wall.

The project’s DRR messages needed to be communicated to communities that were not affected by the current flooding but were at risk of future disasters. This was unfortunately outside the project remit.

**Materials**

A market survey was conducted at the start of the project to identify what kinds of materials were available locally and the shelter construction was designed with this in mind.

The transportation of materials to the beneficiary communities was paid for by the organisation.

**Wider project impacts**

A Beneficiary Satisfaction Survey was conducted at the end of construction. Project evaluations also found that a small number of community members who were not direct beneficiaries have replicated the improved construction methods. Many other people who didn’t qualify for assistance expressed a desire to implement the new techniques in the future.

Following the project’s success, funding for at least an additional 30 shelters has been secured and the NEMA is interested in using the shelter design for future shelter projects in the country.
The technical partner’s recommendations for integrating local resources in shelter projects included the following:

- Put the local populations at the centre of the needs assessment and the evaluation of local capacities and adopt a participatory approach.
- Identify local know-how and methods of organisation, adaptation and housing protection strategies and integrate them into the project.
- Implement pilot projects that enhance and demonstrate the potential of local materials for building quality housing.
- Get involved in the improvement of local housing, integrating local capacities, modern technologies and major risk prevention awareness.
- Pay attention to economic accessibility issues, so that the greatest possible number of people can afford to duplicate the approach.
- Integrate the reinforcement of local capacities and competences by working with local training institutions to ensure a long term impact.
- Make sure that the funds invested in reconstruction programmes result in new income generating activities, with a maximum impact on the local economy and development.
- Define standards that guarantee quality products and processes.
- Influence and sensitize decision-makers and institutions so that they can better contribute to the development of a sustainable and responsible construction sector.

Bill of Quantities

<table>
<thead>
<tr>
<th>Description</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement for foundations, blocks, floor and mortar</td>
<td>25 bags</td>
</tr>
<tr>
<td>Stones (30 cm)</td>
<td>0.15 m³</td>
</tr>
<tr>
<td>Gravel for foundations and floor</td>
<td>0.6 m³</td>
</tr>
<tr>
<td>Wood</td>
<td></td>
</tr>
<tr>
<td>Iron wood 4” x 4” x 8 ft (corner columns)</td>
<td>4 pcs</td>
</tr>
<tr>
<td>Iron wood 2” x 4” x 12 ft (columns, wall plates and rafters)</td>
<td>39 pcs</td>
</tr>
<tr>
<td>Iron wood 2” x 3” x 12 ft (bracings)</td>
<td>6 pcs</td>
</tr>
<tr>
<td>soft wood 2” x 3” x 12 ft (purlins)</td>
<td>30 pcs</td>
</tr>
<tr>
<td>Iron wood 1” x 9” 12 ft (facing boards)</td>
<td>9 pcs</td>
</tr>
<tr>
<td>Corrugated iron sheets 1.8 x 0.7 m²</td>
<td>52 pcs</td>
</tr>
<tr>
<td>Nails (various sizes, including roof nails)</td>
<td>16.5 kg</td>
</tr>
<tr>
<td>3m flat bars for columns and roof</td>
<td>24pcs</td>
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The technical partner produced training material that included a focus on how best to protect walls from water damage. Graphics: CRAterre / Nigerian Red Cross
**CASE STUDY**

**NIGERIA 2015-2016 / CONFLICT**

**KEYWORDS:** Emergency shelter, Site planning, Collective centres, Infrastructure, Protection

<table>
<thead>
<tr>
<th>CRISIS</th>
<th>Conflict (Boko Haram insurgency), 2014-ongoing</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL PEOPLE AFECTED</td>
<td>14.8 million affected (HRP 2016)</td>
</tr>
<tr>
<td>1,878,205 displaced, mainly by Boko Haram (Source: DTM, Aug 2016)</td>
<td></td>
</tr>
<tr>
<td>PROJECT LOCATIONS</td>
<td>Several displacement sites in Maiduguri, Borno State</td>
</tr>
<tr>
<td>BENEFICIARIES</td>
<td>3,433 households (20,480 individuals)</td>
</tr>
<tr>
<td>PROJECT OUTPUTS</td>
<td>1,000 Emergency shelters (Bama).</td>
</tr>
<tr>
<td>1,269 Reinforced shelters (Bakassi). 105 for one large family and 1,164 for two small families.</td>
<td></td>
</tr>
<tr>
<td>SHELTER SIZE</td>
<td>16.2m² (4.5x3.6m – emergency shelters) / 28.8m² (4x7.2m – reinforced shelters).</td>
</tr>
<tr>
<td>SHELTER DENSITY</td>
<td>3.2m² per person (Emergency shelters, maximum five persons per shelter).</td>
</tr>
<tr>
<td>4.1m² per person (Reinforced shelters, maximum eight persons per shelter).</td>
<td></td>
</tr>
<tr>
<td>MATERIAL COSTS</td>
<td>USD 158 for Emergency shelters (including labour and transport).</td>
</tr>
<tr>
<td>USD 845 for Reinforced shelters (including labour).</td>
<td></td>
</tr>
<tr>
<td>PROJECT COSTS</td>
<td>USD 564 per household, on average.</td>
</tr>
</tbody>
</table>

**PROJECT SUMMARY**
The project built emergency and reinforced shelters for over 3,000 internally displaced households across ten sites, using a common design that took into account the needs of different family sizes, cultural practices, as well as climate considerations. The shelter project was part of a broader coordinated effort of the humanitarian community to meet minimum standards while decongesting existing sites, particularly schools.

**STRENGTHS**
- The project enabled the reopening of schools.
- Capacity-building of local contractors and labourers.
- Climate and culturally appropriate design.
- Various types and sensible allocation of shelters.

**WEAKNESSES**
- Construction began too close to the rainy season.
- Recruitment challenges.
- Lack of site planning technical expertise.
- Different pace of delivery across sectors.

**TIMELINE**


2015: Over 20 IDP sites formally established in Maiduguri and Jere. Nearly half of which are schools, occupied for over two years.

30 Sep 2015: High Powered Committee For The Re-opening of Schools Within State Capital approaches the UN and INGOs to assist with the relocation of IDPs to alternative sites.

Oct 2015: Humanitarian community commits internal funding to start the relocation process.

Nov 2015: CERF Proposal is made while mapping of available spaces for shelter constructions is carried out. A location is provided by the government for 2,500 shelters.

Dec 2015: Biometric registration starts.

May 2016: Existing IDP sites receive shelter upgrades, decongestions, and rainy season preparedness (i.e. drainage improvements).

Mid-May 2016: Shelter construction begins in Bakassi camp.

Jul 2016: Inter-Agency multi sector assessments reveal dire needs in new locations and the programme is adjusted. Emergency shelters are used to intervene in these locations.

[www.shelterprojects.org](http://www.shelterprojects.org)
BACKGROUND AND CONTEXT

The north-eastern part of Nigeria has witnessed an increase in violence since the beginning of 2015, causing a major humanitarian crisis. The Islamic fundamentalist group Boko Haram initiated their insurgency in 2009, with attacks against government targets in Maiduguri, the capital of Borno State. In 2014, the insurgency ramped up in scale and brutality, with Boko Haram capturing large swathes of the North-East and turning their violence to civilian targets. Massive displacement followed, and persisted throughout 2015-2016.

More than two years after the crisis began, over 1.8 million people remained displaced and would continue to be throughout 2017. Displacement was concentrated mainly in Borno State, with Adamawa, Yobe and Gombe States also hosting displaced people. The Nigerian Military regained territory but Boko Haram remained active, forced back into the use of terrorist tactics. The humanitarian response in 2017 would cover all four states, though access to large territories remained very limited, in particular in Yobe and Borno, with high security concerns.

Nigeria’s North East has a predominantly tropical dry climate, and the rainy season spans between June and September, with heavy rain and high winds. The rest of the year is hot and dry, with temperatures climbing as high as 40°C. The Harmattan dry wind affects the region with fine dust from November through March.

SITUATION AFTER THE CRISIS

Before the crisis, people in urban and peri-urban settings in the North-East lived in concrete or block dwellings with roofs constructed of corrugated iron sheets or comparable material. In rural areas, mud and thatch dwellings were typical. The majority of the IDPs found shelter within host communities, sharing with relatives or friends, or renting. Around 9% of the total displaced people lived in camps or camp-like settings. The camp populations were generally the poorest among the affected communities, those who left only at the point of violence, because they lacked the resources or networks to find their own alternative accommodation.

Some sites were open fields where temporary shelter had to be erected, shelter conditions ranging from makeshift shelters (usually domes built of grass or other readily available materials in vernacular style) to tents and emergency shelters constructed with plastic sheeting provided by aid agencies.

The majority of the camps and camp-like settings were collective centres – pre-existing buildings such as schools, government buildings, and unfinished construction projects. Usually, these were communal and high-density types of shelters, with overcrowding and persistent health risks. The use of schools as displacement sites since 2014 severely hampered education in the area, especially in Maiduguri.

NATIONAL SHELTER STRATEGY

The Shelter-NFI Sector Working Group, led at the time by the National Emergency Management Agency (NEMA) and the implementing organization, defined several objectives in the Humanitarian Response Plan 2016:

1) Raising shelter standards in formal and informal camps to meet Sphere indicators through provision of reinforced emergency shelters.
2) Maintaining an adequate pipeline of minimum emergency shelter kits and NFI kits for distribution to the most vulnerable – in particular, newly or secondarily displaced people, including new arrivals in the camps.
3) Extension of support into host community settings, which had received little to no response at the end of 2015, by adding and/or repairing available covered space where there was severe overcrowding.
4) Reinforced emergency shelter or repair upon return, where conditions were conducive (e.g. security-wise), targeting the most vulnerable whose houses had been destroyed.

The strategy emphasized sustainability, including benefit to local economies through use and sourcing of locally available materials, and with cash and vouchers to be used wherever appropriate. The sector also sought to mainstream protection, including through the provision of solar lights and fuel-efficient stoves, and the prioritization of female-headed households.

SCHOOL CAMPS PHASING-OUT PLAN

Eight school buildings in Maiduguri were occupied by approximately 38,145 IDPs for more than a year and a half. In late 2015, the government began to work towards the reopening of educational institutions, and the Ministry of Education and the humanitarian community formed a Taskforce, which created timelines for phasing out the School Camps into relocation sites identified by local authorities. Once space in or surrounding existing displacement sites was identified, the Taskforce worked with different sectors on site planning to expand and decongest such camps, as well as upgrading and adding shelters in other sites.
PROJECT GOALS
The main goals of this project were to establish new sites for the relocation of IDPs hosted in schools and the decongestion of other overcrowded camps; and support family reunification (as displacement sites were often gender segregated). The shelter project was part of a broader coordinated effort of the humanitarian community to meet minimum standards, as most of the camps in Maiduguri had been quickly set up during the onset of the emergency as lifesaving centres. Amongst other issues the sector focused on the standardization of shelter designs, proper site layout for mitigation of fire risks, and ensuring access to a full range of basic services.

BENEFICIARY SELECTION
The bulk of the project firstly targeted the people living in schools in Maiduguri. The remaining shelter capacity was used to decongest the most overcrowded sites with worst shelter conditions.

Shelter needs, as well as other priorities and disaggregated demographic data, were collected through assessment teams, which developed site profiles for all school locations based on the following criteria: 1) family reunification; 2) site population; 3) family size. Biometric registration was used to identify and register families, and biometric cards were used for relocation, allocation of shelters and distribution of NFIs at household level.

PROJECT LOCATIONS AND SITE PLANNING
A government-owned undeveloped plot of land of over 650,000m² was initially allocated and agreed with local authorities for the extension of the existing Bakassi camp, next to housing estates which were being constructed for civil servants. Further government land allocations were then granted, including extensions of other existing camps. All proposed sites were assessed for hazards and risks, and were agreed in collaboration with humanitarian actors.

The main site planning considerations for the Bakassi camp expansion were to maximize the use of available space, mitigate against flooding risks, ensuring minimum standards and providing infrastructure and basic services. These included clinics, kitchens, drainage, water and sanitation facilities, schools, livelihoods spaces, as well as distribution, registration and camp management points. The whole area was occupied and no further evolution or phasing out plans were made at the time of project planning and implementation.

Additionally, seven other sites were upgraded, decongested and drainage was improved. In informal camps, where displaced people had spontaneously settled (usually on private land), written agreements with land owners were sought and secured.

PROJECT IMPLEMENTATION
The project was implemented with contractors to speed up site preparation, thus facilitating a swift relocation of the IDPs from the schools. The organization also benefited from a partnership with NEMA, whose contribution to the project comprised of roofing sheets, aggregate, cement and water trucking for about 1,000 shelters, through the different phases of the project.

The shelter team was composed of five members: one shelter manager, one shelter officer, and three engineers (WASH, shelter and site planning).

As implementation started just before the rainy season, road access to the building sites became almost impossible and all camps were flooded, slowing down construction significantly. Moreover, as soon as the initial relocations were carried out (as this was done in phases), people began dismantling the unoccupied shelters to use the timber for firewood. Coordination was undertaken to ensure sufficient access to fuel and security for unoccupied shelters, which were also being repaired in preparation for their coming occupants.

Shelters were then handed over to NEMA, and the allocation was carried out together with camp managers from the organization. NFI distributions were conducted by inter-agency relocation teams, and the NFI kit was part of the shelter package distributed when the families moved into the shelters.

During project implementation, the programme was adapted to provide an additional 1,000 emergency shelters to the affected population in newly accessible areas (Bama and Gwoza).

ENGAGEMENT OF AFFECTED PEOPLE
At the sector level, affected people were engaged in focus group discussions, to define a shelter design that would meet their needs, as well as being climate and culturally appropriate. Different designs, proposed by various organizations, were validated with the displaced families, to reach an agreement over one prototype to be used by all actors. Two models were finally adopted, one for emergency response and one with a longer life span of two years (reinforced shelters).

During this project, affected people were further engaged
in a variety of ways, such as in beneficiary selection, flood mitigation measures and basic repairs at the household level, community messaging on relocation or available services.

Cash-for-work was also used to engage IDPs in the construction of the shelters and support households with a daily income to meet other needs. This was included as a condition in the contractual terms with the contractors, although one challenge faced by all partners in the area was the poor quality of local labour. Locally hired workers required on-the-job training and constant supervision to ensure use of proper techniques and consistency. The Sector Working Group produced infographics to support training, and the capacity-building component actually turned out to be one of the most successful outcomes of the project. However, the construction-related activities did not engage women, who instead were involved mainly in community activities and messaging.

SHELTER DESIGN AND ALLOCATION

The original design presented by the Sector Working Group featured a raised roof and an open space under the eaves for ventilation. The design had to be quickly adjusted to include concrete foundations and metal strips to lock all trusses to the beam, to prevent the entire structure from being lifted by strong winds. Backfilling in all shelters was also undertaken, to raise the plinth to prevent water coming into the shelter.

The design proposed internal partitions to allow for increased privacy, diversified use of space and adjustment to the needs of families. Following consultations with the communities, all polygamous families were given one shelter per wife, which was important to ease tensions and allow for family reunification. Shelter allocation was also based on the family size, primarily the number and age of children. The different shelter sizes allowed to cater for different family structures and respect minimum international standards.

MATERIALS SOURCING

Almost all materials were purchased locally, for cost effectiveness and for the indirect benefit of the local economy. The only item brought from outside was plastic sheeting, as sufficient quality was not attainable in local markets.

Several actors were building shelters at the same time, resulting in a serious shortage of building materials, including timber, nails and roofing sheets, and slowing down the construction process significantly. For roofing materials, this was somewhat mitigated by purchasing directly from local manufactur-
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

+ The project enabled hundreds of children to go back to school as a result of the relocation of IDPs from the school buildings.

+ Capacity-building of local contractors and their labourers in technical construction skills, many of whom were IDPs. There were clear and definite improvements in the contractor’s skill and workmanship over the course of the project.

+ Shelter design was climate and culturally appropriate.

+ Type and sensible allocation of shelters allowed families to be reunited after living separated for more than a year. This was particularly relevant for polygamous families.

LEARNINGS

- Ground works must be initiated as early as possible, and locations coordinated effectively amongst implementing actors; early procurement, warehousing and storage of materials are essential.

- The construction of model shelters and trainings on construction techniques and skills are extremely valuable, particularly where the local skills base is low. This is true both to check and adjust the climactic and cultural appropriateness of the design (prior to large scale implementation) and to identify common technical mistakes early.

- A coordinated effort should be made to identify local and regional procurement and supply possibilities, and to plan accordingly for maximum benefit to local markets, minimal delay, and adequate and consistent quality. This is especially relevant when the scale of the intervention is likely to saturate local market capacities.

WEAKNESSES

- Construction began late, too close to the rainy season, causing problems. Delays were caused by multiple factors, including slow agreement on allocation of responsibility for different camps and locations between some partners.

- Procurement challenges also contributed to the delay on the project. At the time, Nigeria’s emergency was under-recognized, which contributed to challenges in securing appropriate and timely human resources. Subsequent prioritization of the emergency through internal L3 designation by UN agencies (in October 2016) enabled to build up the capacity.

- Lack of site planning technical expertise across agencies, when it was most needed during the emergency.

- Different pace of delivery across sectors, such as shelter and water and sanitation.
KEYWORDS: Shelter repairs, Cash, Links with recovery, Security of tenure / HLP

CRISIS
Conflict (Boko Haram conflict), 2014–onwards

TOTAL PEOPLE AFFECTED*
7.7 million affected; 1.6 million displaced; 1.3 million returnees; 2.1 million with shelter needs

PROJECT LOCATIONS
Hong and Gombi LGA in Adamawa State, Gwoza and Ngala LGA in Borno State

PROJECT BENEFICIARIES
900 households (5,683 individuals)

PROJECT OUTPUTS
900 damaged houses repaired
710 households receiving livelihoods assistance

OUTCOME INDICATOR
100% beneficiary satisfaction

SHELTER SIZE
24.5m² (two rooms of approx. 3.5x3.5m)

SHELTER DENSITY
3.8m² per person

MATERIALS COST
USD 538 (incl. cash grant)

PROJECT COST
USD 660 per household


PROJECT SUMMARY
Through a settlement-based approach, the project provided shelter repair support to affected households, as well as rehabilitation of community infrastructure, vocational training and livelihood assistance. The shelter component targeted 900 households with damaged houses in return areas, using a combination of in-kind distribution and cash grants. An individual scope of work was developed for each damaged house and technical supervision was provided during the rehabilitation, undertaken by the families themselves. The cash distribution was challenging due to high security risks and limited financial service providers.

STRENGTHS
+ One-hundred per cent beneficiary satisfaction.
+ The most vulnerable groups were reached.
+ Families were able to rehabilitate their entire houses.
+ The shelter component was linked to livelihoods interventions.
+ The project enabled family reunification.

WEAKNESSES
- The cash was distributed late, leading to some people needing to take out loans.
- Distributing the cash in one instalment affected the conditionality of the grant.
- Differing levels of damage required a more flexible package.
- Preparatory stages took a long time.
- Livelihood activities were temporarily disturbed for some families.
- There were not enough materials to build or repair WASH facilities.

TIMELINE

2014


01 Aug–30 Sep 2017: Shelter needs assessments in return areas.

01–30 Oct 2017: Cash feasibility assessments, focus group discussions, market assessments.

2017

1

1

2

3

4

5

2018

6

7

8

9


01 Aug–30 Sep 2017: Shelter needs assessments in return areas.

01–30 Oct 2017: Cash feasibility assessments, focus group discussions, market assessments.

01–30 Nov 2017: Beneficiary identification and registration.

01 Dec 2017–15 Jan 2018: Development of scope of work for each household.


01 May–30 Jun 2018: Development of context-specific assessment tool and adaptation of the tool suggested by the Sector.
CONFLICT

There were not enough materials to build or repair WASH facilities. Livelihood activities were temporarily disturbed for some families. Preparatory stages took a long time. Differing levels of damage required a more flexible package. Distributing the cash in one instalment affected the conditionality of WEAKNESSES.

STRENGTHS

The project enabled family reunification. Families were able to rehabilitate their entire houses. The most vulnerable groups were reached. One-hundred per cent beneficiary satisfaction. 

TIMELINE


PROJECT OUTPUTS


1 For another example of a shelter project implemented by the organization in the country, see case study A.18 in Shelter Projects 2015-2016. The kits contents are available at https://bit.ly/2TnnbVw.

2 The population data was taken from the Displacement Tracking Matrix (DTM), http://www.globaldtm.info/nigeria/.


NATIONAL SHELTER STRATEGY

The national shelter strategy in 2018 aimed to: 1) ensure sufficient, coordinated and adequate delivery of emergency shelter solutions to respond to immediate needs; 2) deliver reinforced/transitional shelters and repair assistance; and 3) deliver flexible, coordinated, adequate and harmonized NFI kits. 

Aligned with this strategy, the organization implemented different types of shelter interventions in the country, including construction of emergency and transitional shelters, distribution of emergency shelter kits, construction of transit shades and reception centres and reinforcement of emergency shelters in displacement sites. 

WIDER PROGRAMME GOALS

To support returnees in re-establishing themselves in their areas of origin, the organization implemented a wider programme, which included livelihood activities and quick-impact community projects. This case study focuses on the shelter repair component, which distributed shelter repair kits and cash top-up grants, as recommended by the Sector. 

TARGETING

The organization conducted detailed shelter needs assessments in the most affected areas with the highest number of returnees. The Local Government Areas (LGAs) were selected based on the severity of destruction, the socioeconomic impact of the crisis on livelihoods and the availability of other humanitarian actors.

In the target areas, a stakeholder mapping was first conducted. Group discussions and key informant interviews were then held with the community members, local leaders, vendors and Financial Service Providers (FSPs). Secondary data analysis was conducted through the 4W matrix of the Sector, to identify the partners present in the locations, the types of assistance provided and the existing gaps.

The distribution team included psychosocial support staff to identify and assist vulnerable individuals.
The selection of beneficiaries in the LGAs was conducted in accordance to the level of damage to the houses (with categories 1–4, from light to heavy damage). Female-headed households, the elderly, persons with disabilities and mental illness were prioritized. The criteria for selection were communicated to the community.

**PROJECT IMPLEMENTATION**

The project was directly implemented by a team of 30 staff, with eight technical supervisors in the field and 22 enumerators, overseen from Maiduguri and Yola. The following main steps were taken.

**PROCUREMENT.** Materials were procured locally through competitive bidding and were delivered to the organization’s warehouse without delays.

**CASH FEASIBILITY ASSESSMENT.** Since the damage level and materials used for each house differed, a cash grant was included in the kit, to give the households the flexibility of buying additional materials to complement the standard package, as well as to engage skilled labour for the rehabilitation works. A comprehensive assessment was carried out by shelter teams with the technical support from a cash advisor. Standard Operating Procedures for cash-based interventions were developed specific to the context. Due to the lack of mobile network infrastructure in the target areas, mobile money transfers were not an option. Cash-in-envelope was also discarded because of the security risks. Therefore, the transfer had to be done through an FSP.

**SELECTION OF FSP.** Initially, there was lack of interest from FSPs in operating in high-risk areas, and this led the organization to request for bids several times. Meetings were held with FSPs to explain the nature of the project, as most of them had not been involved in humanitarian cash transfers before. Since beneficiaries did not have bank accounts and there were no functioning banks or postal services in the target locations, the organization prioritized FSPs who had local agents in those areas. After a lengthy analysis and consultations with various FSPs, a prominent bank with registered agents in Borno and Adamawa State was selected.

**SCOPE OF WORK.** Technical supervisors were deployed to prepare a scope of work for each household, based on the assessed level of damage and the materials and the cash available.

**DISTRIBUTION OF MATERIALS.** Distribution was carried out by a team of 11 staff, including one staff to assist with biometric verification of beneficiaries; three shelter staff to verify the kits provided and offer technical advice and sensitization on the usage of the kits; five site management staff facilitating the distribution, including crowd control and setting up of a complaints desk; two psychosocial support staff to identify vulnerable beneficiaries and ensure their safe and equitable access to assistance. Push-carts were also arranged to assist vulnerable families to carry the materials home.

**CASH DISTRIBUTION.** Due to the lengthy FSP selection process, the cash distribution did not take place along with the material distribution and could not be disbursed in two instalments, as originally planned. The cash was distributed in one instalment, during the last month of the project, by bank agents overseen by project staff.
**LINKS WITH RECOVERY**

To support communities to recover more holistically, the shelter project was linked with several quick-impact livelihood activities in the same locations. These included the provision of short-term cash-for-work opportunities to rehabilitate community infrastructures (school, markets, roads, etc.). Vocational training was provided to the same communities on the trades that were most in demand, namely cap knitting, drink production and baking, and these were supplemented by a start-up business grant. The project also provided capacity-building and para-veterinary kits to a local group and distributed animal food to livestock owners in the same communities. A total of 710 households benefited from these activities.

**HANDOVER PHASE**

No formal handover was required. Each household had their own scope of work based on the type of damages, so they were aware of all the steps of the rehabilitation from the outset, as well as the expected achievements. The roving technical supervisors knew when the family completed the required rehabilitation works. Following this, a certificate of completion was duly signed by a technical supervisor and the head of household.

**WIDER IMPACTS OF THE PROJECT**

The needs assessment and post-distribution monitoring reports were widely shared with all partners engaged in shelter activities in the north-east, to disseminate the findings and lessons learned.

Efforts were also made at the Sector level to incorporate some of the recommendations from the post-distribution monitoring of this project, in order to slightly modify kit contents. After the project, the organization expanded both the materials and cash amount in the kit. It also started to look into expanding its cash-based interventions for shelter.

Finally, due to the success of this project, the Nigerian Humanitarian Fund – which usually supports emergency shelter kits and construction of emergency shelters – started funding similar projects in other locations. As the project included early recovery initiatives, other donors also showed interest.

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**COMMUNITY ENGAGEMENT**

Ahead of distributions, community mobilization activities were conducted providing information on dates and place of distribution, as well as entitlements of each household. Community consultations were also a key component of the cash feasibility assessments. This was done to explain project activities and to minimize the risk of any potential tensions among community members. Community leaders assisted during the distribution process to ensure it took place smoothly, as well as to fast track the process for any vulnerable household.

The families actively contributed to the rehabilitation works both in terms of labour (29%) and additional materials (21%). Carpenters and masons from the community assisted extremely vulnerable families in the construction works for free.

**HOUSING, LAND AND PROPERTY**

HLP issues were considered during the assessments and beneficiary identification, for instance the possibility of another group claiming the land or properties. In the selected LGAs, the majority of the houses were inhabited by the owners, and the community had strong intra-communal consensus on land tenure. If no ownership document was available, a written form of approval from the community leader and representatives was provided as proof of ownership, as a formal documentation process was not possible for most families.

The organization also consulted the LGA chairmen, who could ascertain whether a group of people was originally from their area. Despite tenure being disconnected from any formal system, the level of tenure security was considered "high enough" to allow for shelter rehabilitation to proceed.

In a different LGA that was not targeted, there was no consensus between the community as to the real owners of the houses and land. For this reason – and due to the limited time frame – it was impossible to proceed with implementation.

For those who needed support, push carts were available to transport materials.

Families were able to repair their entire house, in some cases even expanding the original size. This also supported family reunification.
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

+ All of the surveyed beneficiaries reported being satisfied with the assistance, as it had significantly improved the living conditions of their families. This was possible also thanks to their engagement throughout the process.

+ The most vulnerable groups were reached and the selection process was deemed fair and transparent by the beneficiaries.

+ Families were able rehabilitate their entire houses and some could even expand the original size of the house.

+ The project was linked to livelihoods interventions as part of a holistic approach to support communities’ recovery and social cohesion.

+ Some families were able to reunite as a result of repairs to their homes.

WEAKNESSES

- The cash disbursement took place several weeks after the material distribution. This led to some of the beneficiaries needing to take out a loan to rehabilitate their shelters, although they were able to pay them off when the cash was received.

- Distributing the cash in one instalment affected the conditionality of the grant. However, post-distribution monitoring showed that most families used their own resources towards the project goal.

- A more tailored package of repair kits and cash grants would have been useful to adapt to the level of damage and the type of materials (e.g. masonry vs mud houses).

- Preparatory stages for this project took a long time, as this was the first project of its kind for the organization in Nigeria, which impacted the actual implementation period.

- The project temporarily disturbed livelihood activities of some families, as the head of household had to carry out or supervise the rehabilitation works.

- There were not enough materials to build or repair water and sanitation facilities.

LESSONS LEARNED

• Following this project, the kit contents and cash amount were adjusted based on lessons learned and beneficiaries’ feedback. Additional tools and one extra bundle of CGI for roofing were included. The cash grant was also increased by about 30 per cent (USD 28), to allow people to cover larger portions of their houses, and repair or rebuild water and sanitation facilities, as well.

• Brick-making moulds should be considered, as buildings in most of the targeted locations are made of mud bricks. In addition, training on mud brick production and providing start-up business capital to small traders of construction materials would ensure a better connection between the supply and demand of shelter materials in the local market.

• Longer-term contracts should be given to financial service providers, as the selection process took very long. The organization made efforts to allow for more flexible agreements to avoid future delays in cash disbursements.
This booklet is a compilation of case studies of humanitarian shelter responses from Central and West Africa compiled across the seven 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