STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

+ Adaptable and contextual programme that remained relevant in a changing environment, allowed by a flexible funding.

+ Communities and households were given full control over implementation funds and took on much of the responsibilities, allowing them to truly lead and take ownership of the project.

+ The focus on capacity-building and technical advice supported the owner-driven, community-managed, approach to become a success.

+ Recovery programming successfully transitioned into development issues and became the basis for long term community development programming.

+ Winning the communities’ trust with early projects that served all, smoothed the way for participation and cooperation later on.

WEAKNESSES

- Time and resources to properly document the development of new methodologies were not adequately allocated.

- Alignment of programmes on different sides of the country proved challenging in some areas. Because ultimately the programmes developed quite differently, some systems and structures designed for one context could not be easily adopted for the other.

- Engagement with the local government was difficult, due to their limited capacity and the organization’s community-focused, bottom-up, approach.

- Recruitment difficulties early on, specifically in relation to specialized roles such as engineers, delayed critical paths to implementation.

- In hindsight, the scope of the programme could have been expanded to cover more communities without compromising on quality. In balancing the quality vs. scale dilemma, smaller scale interventions were chosen, to maximize impact in the selected communities.

LEARNINGS

• Conditional cash transfers can be an effective tool for strengthening the owner-driven approach in shelter construction, while retaining quality control for the organization.

• Communities can be capacitated to take on more responsibilities in shelter implementation. Areas such as logistics and procurement can be managed by the beneficiaries, if training is provided and markets are functioning.

• In supporting self-recovery, shelter programming should be used as a platform to promote broader learning about resilient construction techniques and look beyond traditional shelter outputs.

• Resilience Programmes require “smart baselines” in order to evaluate beyond the programmatic outputs. Baselines should include elements of social assessment and aim to reflect knowledge, attitudes and behavioural change.

• Elements of typhoon-resilient house design will not be replicated if the materials go beyond the usual budget of homeowners (e.g. bolts vs. nails). Sometimes, weaker (yet cheaper) alternatives should be used, in order to aspire towards replicability and ultimately engender behavioural change.

The programme led to a variety of community-wide infrastructure projects and communal facilities, led by the communities themselves.
OVERVIEW

VANUATU 2015 / TROPICAL CYCLONE PAM

<table>
<thead>
<tr>
<th>CRISIS</th>
<th>Tropical Cyclone Pam, Vanuatu, 13 March 2015.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL HOUSES DAMAGED</td>
<td>16,256 houses: 8,155 damaged; 8,101 destroyed.</td>
</tr>
<tr>
<td>TOTAL PEOPLE AFFECTED</td>
<td>188,000 people.</td>
</tr>
<tr>
<td>PEOPLE SUPPORTED</td>
<td>26,304 households.</td>
</tr>
<tr>
<td>RESPONSE OUTPUTS (households)</td>
<td>26,304 tarpaulins. 13,420 shelter tool kits. 8,215 safe shelter awareness. 6,783 fixing kits.</td>
</tr>
</tbody>
</table>

SUMMARY OF THE RESPONSE

On 13 March 2015, Category 5 Tropical Cyclone Pam struck the archipelago of Vanuatu. The government and various national and international organizations first responded with the delivery of emergency shelter items: tarpaulins, shelter tool kits and kitchen sets. The response then moved to supporting self-recovery and strengthening resilience through safe shelter awareness and fixing kits. The Shelter Cluster, activated for the first time in Vanuatu for this response, then remained active for preparedness as part of the Vanuatu clusters platform.

14 Mar 2015: Deployment of Shelter Cluster Coordinator to support the Government of Vanuatu for the shelter response.
22 Mar 2015: First distributions of emergency shelter materials.
4 May 2015: Humanitarian Action Plan target of 18,000 households reached with tarpaulins.
31 Jul 2015: End of the humanitarian phase, clusters coordination platform ended and transitioned to the Recovery Framework.
17 Aug 2015: Shelter Cluster response evaluation to inform the effectiveness of the shelter operational response and the recovery and preparedness strategies following Cyclone Pam.

Map of shelter and NFI activities implemented by location, as of 31 July 2015 (Source: Shelter Cluster Vanuatu). The tropical cyclone cause extensive damage in several provinces, including Efate Island, where the capital Port Vila is located.

The cyclone affected public buildings as well as private ones.

Tongoa: Shelter, Vanuatu Children’s Fund, VRC/IFRC, VRC/FRC, World Vision, IOM.
Tongariki: Shelter, Shelter Tool Kit, Tarpaulin.
Vanuatu Red Cross: Shelter Tool Kit, Tarpaulin.
MALEKULA: Shelter, Shelter Tool Kit, Tarpaulin.
EMAU, LELEPA, MOSO, NGUNA, PELE: Shelter, Shelter Tool Kit, Tarpaulin.
TANNA: Shelter, Shelter Tool Kit, Tarpaulin.
EFATE (Port-Vila): Shelter, Shelter Tool Kit, Tarpaulin.
EROMANGO: Shelter, Shelter Tool Kit, Tarpaulin.
ANIEWA: Shelter, Shelter Tool Kit, Tarpaulin.

[Timelines and Shelter Cluster response outputs as per the document]
CONTEXT

Vanuatu is a Y-shaped archipelago in the Pacific, with more than 80 islands and a population of 262,691 people – 80% of whom live on their land from generations and follow vernacular practices. It is among the countries with highest risks of natural hazards including cyclones, earthquakes, volcanic events and climate change. The archipelago sits along a volatile seismic strip called the “Ring of Fire”. The tropical cyclone season in Vanuatu normally runs from November to April. Throughout this period there is a high risk of strong winds and heavy rains with associated flooding, landslides and road closures.

In Vanuatu as elsewhere in the Pacific, traditional coping mechanisms help to significantly lessen disaster impacts. For example, the understanding of weather patterns and formation of clouds over the island, or the observations of sea birds, indicate impending strong winds, helping to alert local people to prepare adequately. Such local response capacity has been reinforced through provincial disaster committees based in remote islands, offering coordination and support at a more local level. Many Vanuatu inhabitants (ni-vans) are skilled at building or repairing their own dwellings and, therefore, a large percentage of the population live in self-built houses, made of natural materials that are available locally.

Recognizing its status as one of the most disaster-prone countries in the world, Vanuatu has set up a national structure for disaster preparedness and emergency operations. The cluster coordination mechanism was adopted by the National Disaster Management Office (NDMO) and the Vanuatu Humanitarian Team in 2011. The NDMO had contacted the lead agency of the Shelter Cluster within the Pacific Humanitarian Team three weeks prior to Cyclone Pam, to support the establishment of a Shelter Cluster, which did not exist within the existing cluster coordination platform in Vanuatu.

In some communities, NGOs have been working in partnership with NDMO to establish Provincial and Community Disaster Committees in order to facilitate the necessary training to enable them to monitor hazards (e.g. using cyclone tracking maps), mobilize or evacuate communities and conduct an initial assessment of the effects of the disaster.

SITUATION AFTER THE CYCLONE

The cyclone caused widespread damage across five provinces, its eye passing close to Efate Island in Shefa Province, where the capital Port Vila is located, with winds around 250km/hr, and gusts peaking at 320km/hr. According to the Government of Vanuatu, 188,000 people were affected by the cyclone. Various elements, such as community disaster preparedness, traditional coping mechanisms, early warning systems and access to evacuation centres, helped to prevent a higher death toll, with only 11 fatalities reported. Nevertheless, the cyclone had a devastating impact on many government and community buildings, infrastructure, forests, agriculture, water supply systems, and particularly housing. The Post Disaster Needs Assessment, conducted in June 2015, estimated that 8,101 houses were totally destroyed and 8,155 were partially damaged. Damage to housing represented one third of total monetary damages. On some islands, more than 90% of houses were reported as damaged or destroyed. Thousands of people were temporarily displaced to makeshift evacuation centres such as schools, churches and community buildings.

Unsurprisingly, the buildings that suffered the most damages were those outside traditional communities – mainly in informal settlements – that were made of mixed traditional and modern materials and incompatible construction systems. After Cyclone Pam, many of these were being rebuilt in the same way as before, thus recreating (when not exacerbating) the same hazard vulnerabilities, due to a lack of proper materials, building know-how and financial resources.

NATIONAL SHELTER STRATEGY AND RESPONSE

Due to the impact of the disaster (almost 70% population affected), the National Disaster Committee, following receipt of damage assessment reports, decided that relief efforts had to be applied at all times on a fair and equal basis (according to needs), and to adhere to the government’s “self-help” concept wherever possible. The use of cash to support self-recovery was not encouraged, due to cultural acceptance, weak markets in Port Vila, limited stock in country or a non-existent market on outer islands. Shelter and housing recovery had started rapidly, showing once again the resilience of ni-vans.

The Shelter Cluster became officially active for the first time in Vanuatu after the Prime Minister’s Office assigned the Public Works Department to lead it with the support of the international agency identified before the cyclone. The Department of Local Affairs, the National Disaster Management Office and another international agency were closely supporting the Cluster, reflecting the inter-relatedness of humanitarian shelter and long-term housing issues. At its peak, the Shelter Cluster consisted of 23 partner agencies.

In response to Pam, the main goal of the Shelter Cluster was to support self-recovery through the provision of appropriate tools, materials and technical assistance. This was achieved primarily through the distribution of tarpaulins (to 28,304 households) and tools (to 13,420 households) during the relief phase. In addition, safe shelter awareness was provided to 8,215 households, fixing kits and construction materials to 6,783 households to complement the initiatives of the affected households to repair, retrofit or rebuild their dwellings, and make them more resilient to future cyclones and other natural hazards, by mainstreaming the Build Back Safer approach.

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2 For a similar situation see A.39 (Ecuador earthquake response overview).
A significant part of the resilience of Vanuatu is founded on vernacular shelter- and settlement-related knowledge, practices and coping mechanisms. These include specific construction materials, techniques and typologies that are a part of the traditional building culture, social organization and familial safety net that have been established over time. A household in Vanuatu does not refer to one nuclear family living under one roof, but generally to an extended family, i.e. consisting of a number of family members (parents and children) and relatives such as grandparents, aunts or uncles living in a number of buildings in a communal setting. Accordingly, the “house” is not just one building; it is composed of at least two dwellings with different purpose and design, usually centred around a communal kitchen, and it includes a garden. For example, in Tanna island the community kitchens or meeting places are usually designed and maintained to be used as safe shelters when cyclones strike. Men and boys hold down the wooden structure to add strength to the building, thus protecting women, children and other vulnerable community members. To promote and preserve the ni-van resilience, the government strongly supported the retention and promotion of this knowledge and practices.

In respect of the “do no harm” principle, humanitarian agencies did not build houses, but instead provided safe-shelter awareness and materials that explored ways in which modern construction can learn from, and be strengthened through, the lessons from the past. This also aimed to reactivate the fading knowledge for the new generations.

Cluster partner agencies conducted Build Back Safer shelter awareness sessions across communities, such as this one in Tanna.

Households are composed of at least two dwellings, and include shared kitchens and communal gardens. Recovery had to take into consideration all these elements, not only one shelter.

VERNACULAR ARCHITECTURE AND TRADITIONAL COPING MECHANISMS

When a community chief in Tanna was asked about the major challenge that his community was facing with housing, he replied “the introduction of western materials”. When one agency provided safe shelter awareness to a remote community, based on agreed key messages by cluster partners and government, the elders told the youngest: “you see, we told you”.

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LESSONS LEARNED AND WAY FORWARD

An inter-agency baseline assessment was completed five weeks after Cyclone Pam and an evaluation of the shelter response five months after the emergency, at the end of the humanitarian phase.

68% of households reported that they had received some kind of assistance.
76% were able to recover shelter materials from debris.
85% completed substantial repairs or reconstruction works to their shelter.
60% had made changes to their shelter-building techniques.
66% took preparedness measures to ensure that their shelter was safer in the event of another crisis.

The changes to building techniques most commonly reported by the households were the general strengthening of the building (46%), addition of bracing (32%), a change in the location of the shelter (31%), and changes to the foundation (31%).

Despite the demonstration of their strong resilience and capacity to self-recover from the cyclone, communities' vulnerability to potential new hazards remains high, as the recovery has been hampered by the impact of El Niño4 and the subsequent significant time needed for the re-establishment of stocks of natural building materials, as well as political instability and the recent disruption to the tourism industry (due to substandard airport infrastructure).

Lessons from the response to cyclones Pam in Vanuatu and Winston in Fiji5 demonstrate that promoting Build Back Safer is critical to strengthen long-term resilience to natural disasters, and this approach should be at the core of shelter response and preparedness. It would also help to learn from and support the reactivation of traditional knowledge, that is eroding due to a combination of factors, such as migration, urbanization and the passing away of elders.

These two responses in the Pacific context also demonstrate that the means to support affected populations' self-recovery and reconstruction should differ on a contextual basis and follow the “do no harm” principle. Resilience could in fact be hampered by inappropriate response, as for the case of cash-based interventions or the introduction of new materials and technologies to Vanuatu.

4 The El Niño Southern Oscillation (ENSO) cycle is a scientific term that describes the fluctuations in temperature between ocean and atmosphere in the east-central Equatorial Pacific, with El Niño being the warm phase. These deviations from normal surface temperatures can have large-scale impacts not only on ocean processes, but also on global weather and climate. Source: http://bit.ly/1guBq5x
5 See overview A.15, Fiji.
FIJI 2016 / TROPICAL CYCLONE WINSTON

OVERVIEW

CRISIS

Tropical Cyclone Winston, Fiji, 20 February 2016.

TOTAL HOUSES DAMAGED
31,200, 19,700 (63%) damaged, 11,500 (37%) destroyed.

TOTAL PEOPLE AFFECTED
350,000 people (Source: Government of Fiji).

PEOPLE SUPPORTED
36,609 households.

RESPONSE OUTPUTS (households)

36,609 emergency shelter items
24,505 vouchers for construction materials
1,671 safe fixing kits, construction material or repair assistance
110 core or transitional shelters
19,765 emergency safe shelters
450 semi-skilled builders and carpenters trained on Build Back Safer

SUMMARY OF THE RESPONSE

Tropical Cyclone Winston hit Fiji on 20 February 2016. The emergency shelter response started with the distribution of shelter items by the government and various national and international organizations. The government response then moved to the dispersal of vouchers to access selected construction materials through hardware shops. Humanitarian agencies focused on training carpenters and homebuilders. The Shelter Cluster was re-activated, to help the coordination of the 30 organizations that contributed to the shelter response and the development of the Build Back Safer framework. Following the response, the government institutionalized the cluster system as a permanent mechanism for disaster management.

EMERGENCY RESPONSE

20-21 FEB 2016

0 20-21 Feb 2016: Tropical Cyclone Winston impact on Fiji and declaration of State of Natural Disaster.
2 28 Feb 2016: Deployment of Shelter Cluster Coordinator.
3 3 Mar 2016: Flash Appeal released requesting USD 5.3 million for the Shelter Cluster for a target of 112,800 people.
5 9 Apr 2016: Launch of the government “Help for Homes” initiative.

PREPAREDNESS PHASE

7 30 Jun 2016: 24,000 households received e-cards and ordered construction materials.
8 8 Jul 2016: Shelter Cluster lessons learned workshop.
9 14 Aug 2016: Release of the Build Back Safer framework including the 7 key messages.
10 14 Sep: Release of the Build Back Safer tips booklet, deactivation of the Shelter Cluster and handover to new co-leads with preparedness focus.
11 30 Nov 2016: Build Back Safer training for 450 carpenters and homebuilders completed, through construction of more than 110 core and transitional shelters in 77 of the most affected communities.

Storm Track and Housing Damage after Cyclone Winston (© Shelter Cluster Fiji).

Traditional housing construction was studied and included in posters and materials that informed the response and the subsequent preparedness phase (From Country Profiles/Fiji, produced by CRAterre for the Global Shelter Cluster).

Total Housing Damage

- 15,000
- 5,000 - 15,000
- 1,000 - 5,000
- < 1,000

Provinces

<table>
<thead>
<tr>
<th>Western Division</th>
<th>Eastern Division</th>
<th>Northern Division</th>
<th>Central Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>+2,090</td>
<td>+1,920</td>
<td>+1,920</td>
<td>+1,920</td>
</tr>
<tr>
<td>390</td>
<td>260</td>
<td>380</td>
<td>380</td>
</tr>
</tbody>
</table>

HOUSES BY DIVISION

DAMAGED/DESTROYED

- 20900
- 3900
- 2600
- 3800

EMERGENCY SHelters

- < 100
- 100 - 500
- 501 - 1500
- 1500 - 5000
- > 5000

Pacified

- 37%
- 63%

HOUSES

- 3,700
- 19,700 (63%)
- 11,500 (37%)

(Source: Government of Fiji).
CONTEXT
Fiji is an archipelago of 332 largely mountainous islands of volcanic origin, of which 110 are inhabited low-lying atolls. Spread over 18,300km², its population resides primarily on the two largest islands, Viti Levu and Vanua Levu. Fiji is often in the path of tropical depressions and cyclones. While it is seen as a refuge from rising seas for the populations of low-lying neighbours, Fiji itself is not immune to the impact of climate change. Much of its population live on the coastal fringe, and all major cities and towns are either ports or seaside locations. Thirty-one per cent of the population lives below the national poverty line and around 140,000 people live in informal settlements – often in poor quality housing, with inadequate service provision, in environmentally marginal areas and with no legal security of tenure.

SITUATION AFTER THE DISASTER
The cyclone swept through the Fiji Islands as a Category 5 Storm, with wind gusts up to 325 km/hr. The government reported the cyclone had affected more than 350,000 people (40% of the population) across all four administrative divisions, damaging or destroying more than 31,200 houses. Shelter was identified as an immediate priority during the relief phase, when extremely strong cyclonic winds and multiple tsunami-like storm surges caused widespread damage and destruction. The government led the response and called for international assistance. A Flash Appeal was launched, but remained poorly resourced, with only two agencies funded for the shelter response, through the UN Central Emergency Response Fund, supporting only the delivery of emergency shelter items.

NATIONAL SHELTER STRATEGY AND RESPONSE
To coordinate the shelter response, the Shelter Cluster Fiji was activated, after having first been activated for Cyclone Evan in 2012. The Ministry of Local Government, Housing and Environment led the Cluster, with the support of an international agency as co-lead. A coordination team was deployed to support the Ministry and the coordination of the 30 organizations that were contributing to the shelter response. The goal of the Shelter Cluster was to support owner-driven recovery by investing in disaster preparedness and risk reduction, while prioritizing the most vulnerable communities, families and individuals, with three objectives: 1) Provision of emergency shelter and Non-Food Items; 2) Support of self-recovery to repair and rebuild damaged houses with hardware or cash/voucher equivalent, and 3) Provision of technical Build Back Safer training, along with information, education and communication materials for skilled/semi-skilled carpenters and homebuilders.

By mid-September 2016, cluster partners, including the government, reached over 36,600 households with emergency shelter materials, including tents, tarpaulins, shelter kits and shelter tool kits; 19,765 households with emergency shelter awareness; and 24,505 with cash grants under the “Help for Homes” initiative. Due to the impact of the initiative and the lack of funding, cluster partners shifted their priority and activities from objective (2) to objective (3) of the initial strategy, which drove the response to technical assistance complementing the government’s programme. Nine months after the cyclone, 450 carpenters and homebuilders were trained on Build Back Safer, through the construction of more than 110 core and transitional shelters in 77 of the most affected communities.

THE “HELP FOR HOMES” INITIATIVE
Two months after the cyclone, the Prime Minister launched the “Help for Homes” initiative, a USD 34 million voucher programme for affected households to access free shelter and construction materials. This programme provided financial assistance to more than 24,500 homeowners to help rebuild their homes themselves, including informal settlers. While this initiative was in line with objective (2) of the Cluster’s strategy, it did not include any technical assistance component, and was only a push towards recovery.

The selection of eligible households was based on the damaged houses master list provided by the National Disaster

1 See A.07 in Shelter Projects 2013-2014, for an example of a project in response to Tropical Cyclone Evan.

2 See the cluster factsheet at http://bit.ly/2hrHFIS.
ASIA - PACIFIC A.15 / FIJI 2016 / TROPICAL CYCLONE WINSTON OVERVIEW

**NATURAL DISASTER**

3. Tie down from bottom up & use strong joints - Nails are not enough

- Ensure that you have strong connections at all joints - the roof material to the roof timbers, the roof to the walls and the walls to the foundations.  
- Each joint of your house must be reinforced with more than nails.  
- Build every joint so it can’t be pushed or pulled apart. Nails alone are not sufficient to hold joints together when subject to cyclonic forces. Strong connections can be made with cyclone straps, rope and wire.

**WHAT CAN I USE TO TIE DOWN MY HOUSE?**

<table>
<thead>
<tr>
<th>Strongest</th>
<th>Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tie down when strong winds come</td>
<td></td>
</tr>
<tr>
<td>Galvanised metal strap</td>
<td></td>
</tr>
<tr>
<td>Timber Cleats</td>
<td></td>
</tr>
<tr>
<td>Thick galvanised wire (multiple layers)</td>
<td></td>
</tr>
<tr>
<td>Rope or nylon fishing wire</td>
<td></td>
</tr>
</tbody>
</table>

Management Office; targeting the affected Fijians households earning less than USD 24,000 a year. The Ministry of Women, Children and Poverty Alleviation took the lead role in the distribution of the pre-paid electronic cards across the affected areas, with the support of the Ministry of Finance and the Planning Office. The Shelter Cluster provided awareness on Build Back Safer through banners at distribution points and posters included in the information booklet that all households received.

The pre-paid electronic cards were provided with a set amount and a pin number to purchase building materials from hardware stores selected by the government. The following four grants categories were defined:

1) USD 720 for partial roofing damage;  
2) USD 1,440 for serious roofing damage;  
3) USD 2,880 for almost and completely destroyed houses;  
4) USD 720 for families living in informal settlements in the affected areas, who had their homes totally or partially destroyed.

This assistance was only providing some construction materials, therefore labour and other additional costs had to be borne by the family. This programme allowed the selected households to order their construction material before the end of June 2016, but the hardware shops were facing understandable challenges to timely supply and deliver at community level such massive amounts of materials.

**BUILD BACK SAFER APPROACH AND TRAININGS**

Two months and a half after the cyclone, the main Fijian humanitarian shelter agency and the Shelter Cluster ran a three-day pilot Build Back Safer “Training of Trainers”. This event allowed 20 staff and volunteers from humanitarian organizations and NGOs, church groups and vocational education institutions, to improve their skills on safer building techniques, as a preparedness effort for future disasters. This event also helped partners to discuss and understand what trainings at community level should encompass and what information and communication material to develop.

Carpenters’ and homebuilders’ understanding of safer construction methods was enhanced through “learning by doing”, around the construction of a transitional or core shelter for one household in the village. The trained community members would then be better able to support other households in the reconstruction of resilient shelters, when they received their construction material from the “Help for Homes” initiative. While some households might have wrongly interpreted that the grant was sufficient to support the total cost to repair or rebuild their house, the trainings also aimed to highlight how not to sacrifice safety by stretching out partial assistance. Reinforced connections, bracing and protection of openings were the minimum essential components covered by the training.

During the three-day training, trainees (20% were women) completed the construction of a cyclone-rated core house. One vulnerable beneficiary was selected by the community to receive the house, on the understanding that the structure was to remain as a practical example for all community members to continue learning from. These trainings were
accompanied by educational material that portrayed in a graphic and clear fashion how to construct a stronger house, and remained in the community after the end of the training. The “hands-on training” was targeted at local carpenters and builders, many of whom had no formal qualifications, but nevertheless may have wide experience and work to a professional level. Within the framework of communal building, which is widespread in Fiji, these local builders have significant influence. Workshops conducted in one village can thus reach builders from all the surrounding villages.

**KEY MESSAGES AND BOOKLET**

Based on the pilot training and the outcomes of the Technical Working Group, the Shelter Cluster agreed on a Build Back Safer framework around training principles and seven key messages: 1) Site your house safely; 2) Build on strong foundations; 3) Tie-down from the bottom up and use strong joints – nails are not enough; 4) Brace against the storm; 5) A good house needs a good roof; 6) Leave nobody behind, and 7) Be prepared. While most of these messages were similar to other disaster responses, the sixth was specifically addressing accessibility for people with physical impairments.

Using existing and new posters, these messages were included in a new “Tips to Build Back Safer” booklet. The first edition of the booklet (in English) was printed in more than 9,000 copies and disseminated to households and communities through trainings and other activities, such as distribution of construction materials. By the end of 2016, the booklet was also translated in Taukei and Fijian Hindi/Hindustani languages, to inform the ongoing response, as well as for countrywide preparedness.

LESSONS AND WAY FORWARD

It is recognized that, in the Pacific context, shelter responses to natural disaster should focus on promoting Disaster Risk Reduction in support of affected populations’ self-recovery efforts. For Cyclone Winston, the Government of Fiji demonstrated its capacity to implement a large, shelter-focused, voucher programme at scale, supporting more than 75% of the households with a damaged or destroyed house, allowing them to access construction materials provided by the private sector. It is noteworthy that this programme included support to informal settlers.

Although it was swiftly implemented, this programme would have benefited from more investment and support in market analysis, at country and regional level, to support the timely delivery of materials, as well as for post-distribution, impact monitoring and learning for future disaster responses in Fiji and in the Pacific.

This type of approach requires complementary investment in technical assistance, in partnership with Shelter Cluster partners through Build Back Safer workings and safe-shelter awareness. It should also include support from other sectors, such as WASH and livelihoods, along with considerations on accessibility, protection, logistics and other cross-cutting factors.

Learning from the response to Cyclone Winston, the shelter sector in Fiji is now better prepared to respond to future natural disasters, with new technical guidelines and an agreed framework, including key messages, trainings and the booklet (available in the three main local languages). Based on the lessons learned from this and other recent natural disasters, the government took the decision to make the Fiji clusters system permanent in the disaster management cycle, as part of its new humanitarian policy, building on the successful Shelter Cluster transition from this response towards preparedness.
**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), Zangnanando 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.
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.

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.

Technological 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...
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 hand washing and access to drinking water, which led to community behaviour changes in drinking and hygiene practices.

**PROJECT TEAM STRUCTURE**

An Emergency Response Team was set up and coordinated by a team leader, with short term support from technical specialists for WASH and Shelter in the emergency phase. A logistics and a monitoring and evaluation officer were part of the team for a period of six months. Each field team consisted of two project managers, two project assistants and six field supervisors. Each field supervisor was assigned to a commune and supported by a distribution team managed by the local partner. The country office of the organization also had an on-going commitment to work on gender and GBV in their projects.

**RECOVERY SUPPORT**

During the second phase of the response, support was provided to housing and infrastructure rehabilitation, with the construction of demonstration houses in each commune as models for replication; livelihoods reinforcement and regeneration (community-based microfinance and food security, cash-for-work); hygiene promotion, gender awareness and GBV prevention, with the support of community mobilizers based in each village. The cash-for-work activities were intended to engage the affected people in the recovery of their communities. However, they also diverted a target amount of the population from their daily income-generating activities.

The organization implemented a Build Back Safer initiative in six communes of intervention. Several model homes were built and community members were trained on improved building techniques. Additionally, selected staff and authorities were trained on Emergency Preparedness Planning and Disaster Risk Reduction. Unfortunately, families living in some of the flood risk area could not return home to rebuild, and it was unclear what rights they had to their original land and property, or what they could expect as compensation or where they would be asked to relocate to.

**MATERIALS**

Shelter kit materials were procured and stocked locally in a warehouse. Households were provided with a voucher to collect their kits at the warehouse within five days, and were responsible for the transport of materials to their homes. Community mobilization was particularly effective for the most vulnerable, such as pregnant women, the elderly and people with disabilities, who were not able to carry the materials themselves. Other beneficiaries and members of the same communities helped them with transport on a voluntary basis.

**MAIN CHALLENGES**

It was logistically challenging to reach the affected populations at the planned times. For this reason, the distribution of shelter kits was re-planned to target specific geographical areas during set dates, to ease the logistical load, as well as to make reporting more organized and comprehensible.

GBV incidents related to cash distributions. During the monitoring of the shelter project, incidents of GBV were reported through a complaints mechanism. Unconditional cash grant distributions were conceived to give maximum flexibility and choice to the households to cover their priority needs. However, many households who practised polygamy were considered as one unit, despite the fact that they were made up of an extended family, with children from multiple wives, yet the cash and NFIs were only given to one woman in the household. These distributions were reported to not sufficiently provide for the second wife and her children, raising concerns over favouritism and exclusion. Subsequent GBV incidents were related to the tensions between wives and their husband, including verbal and physical abuse. One year on, a study was made of the gender-related impacts of the project.
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

+ 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 toolsets 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.

WEAKNESSES

- 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).

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.
KEYWORDS: Non-food items, NFI voucher fairs, NFI distribution

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.

Total number of households assisted with voucher fairs and in-kind distributions, 2009-2016

- 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 such as clothing, locally produced cooking pots, foam mattresses to plastic basins, farming tools.

3 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.
to flashlights. Depending on the total number of families to be served, the organizing agency sets up several days of fairs in a row, with anywhere between 300 and 700 families participating each day.

Where there might be concerns about vendors charging unfair prices, the organizing agency can set price ceilings on certain key items with representatives of the beneficiaries and vendors; however, bargaining is always encouraged. Selected vendors have to sign an agreement that lays out rules and responsibilities, including no guarantee of sale, respect of price ceilings (and sanctions should these not be followed) and modes of payment. In some instances, a complementary distribution of items such as plastic tarpaulin, jerry-cans, or female hygiene kits, is included, particularly in areas where the market is limited (in quality or quantity) or where the vendor prices for these items are too high.

In line with recommended Cluster practice for direct NFI distributions, adult women in the household are registered as the family’s primary beneficiary to attend the fair — although it is encouraged that she come with her spouse or another family member, to help transport the purchases home.

SCALING UP

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 to inform 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 a point where all major international and national NFI actors now use voucher fairs, for at least some portion of their response.

EVOLUTION OF THE APPROACH

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;
- Experimenting with using vouchers in existing markets (open market vouchers).

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.
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.
**CASE STUDY**

**NIGERIA 2015-2016 / CONFLICT**

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

**CRISIS**
Conflict (Boko Haram insurgency), 2014-ongoing

**TOTAL PEOPLE AFFECTED**
14.8 million affected (HRP 2016)
1,878,205 displaced, mainly by Boko Haram (Source: DTM, Aug 2016)

**PROJECT LOCATIONS**
Several displacement sites in Maiduguri, Borno State

**BENEFICIARIES**
3,433 households (20,480 individuals)

**PROJECT OUTPUTS**
1,000 Emergency shelters (Bama).
1,269 Reinforced shelters (Bakassi). 105 for one large family and 1,164 for two small families.

**SHELTER SIZE**
16.2m² (4.5x3.6m – emergency shelters) / 28.8m² (4x7.2m – reinforced shelters).

**SHELTER DENSITY**
3.2m² per person (Emergency shelters, maximum five persons per shelter).
4.1m² per person (Reinforced shelters, maximum eight persons per shelter).

**MATERIAL COSTS**
USD 158 for Emergency shelters (including labour and transport).
USD 845 for Reinforced shelters (including labour).

**PROJECT COSTS**
USD 564 per household, on average.

**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**

2014:
1. Insurgency begins in 2009. It escalates seriously in 2014 when Boko Haram starts to seize territory, and spreads to neighbouring countries.
2. Over 20 IDP sites formally established in Maiduguri and Jere. Nearly half of which are schools, occupied for over two years.
3. 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.
4. Oct 2015: Humanitarian community commits internal funding to start the relocation process.

2015:
5. 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.
7. May 2016: Existing IDP sites receive shelter upgrades, decongestions, and rainy season preparedness (i.e. drainage improvements).
9. 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.
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.

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
The shelters were built by contractors, with the condition that they hired workers locally including IDPs, who received on-the-job training.

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-ers (rather than vendors), though delays of up to two months were still experienced. This was not possible for timber, which was sourced from merchants around town. The high demand affected both availability and prices. Moreover, the quality of timber decreased towards the end of the project as there were too many actors buying from few vendors. Although those who benefited the most were larger vendors with the capacity to stockpile large quantities and source from neighbouring states, also small businesses profited, as large vendors would usually source materials from them.

Finally, both timber and firewood trade have had a significant environmental impact, with areas suffering desertification, and the risk of this spreading to former conflict areas that became gradually accessible for harvesting.
Shelters included specific details, such as mosquito nets in the open gap beneath the roof, which was intended for ventilation.

**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.

**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.

**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.
MALAWI 2015 / FLOODS

CRISIS

Malawi floods, January 2015.

TOTAL HOUSES DAMAGED

523,347 houses affected. 356,643 completely destroyed.

TOTAL PEOPLE AFFECTED

1,101,364 individuals affected.

336,000 individuals displaced (230,000 in displacement sites; 106,000 in host sites).

RESPONSE LOCATIONS

15 districts affected (the most affected were Chikwawa, Nsanje and Phalombe).

RESPONSE OUTPUTS

(as of August 2015)

Approx. 50,000 households served with NFIs (70,000+ planned).

Over 19,000 households assisted with emergency shelter (32,000+ planned).

Over 2,000 households assisted with repairs and retrofits (5,000+ planned).

SUMMARY OF THE RESPONSE

The floods in Malawi in 2015 led to displacement and widespread damage to housing in the affected areas. Displacement sites were set up in public buildings (such as schools) during the emergency phase, and assistance was provided primarily in these sites. After the first few months, the focus shifted towards relocation and supporting return to IDPs’ places of origin, in order to enable collective centres to go back to their functions, and facilitate early recovery. According to data reported to the Shelter Cluster, emergency shelter support consisted mainly of distribution of tents and tarpaulins, while repairs assistance was primarily in the form of tool kits and/or materials, coupled with trainings.

CONTEXT AND BACKGROUND

80% of the population of Malawi live in rural areas. The economy is primarily agricultural, which accounts for 90% of export revenues. National GDP per capita is one of the lowest globally and the economy has experienced low growth. Malawi is also heavily reliant on investments from global finance institutions. A lack of trust in the Malawian Government by these institutions (since 2013) has led to a reduction in investments, further stagnating economic growth.

Malawi experienced above-average rainfall throughout December 2014 and January 2015. The Southern Region of Malawi received 400% more rainfall than the Long Term Mean for the region. 15 of the country’s 28 districts experienced significant flooding, with a state of emergency declared on 13 January 2015. As a result of the prolonged, heavy, rainfall, the Shire River reached its highest level in 30 years, bursting it banks in multiple areas.

SITUATION AFTER THE FLOODS

The extreme rainfall event and resulting flooding led to displacement, with many affected households evacuated to collective centres (schools, churches and mosques). As these naturally (and in some cases enforcedly) disbanded after the first two months, affected households with no long-term shelter solution constructed simple emergency shelters, or stayed with host families.

Properties sustained damage through a combination of rain and high winds. The most affected communities were more...
vulnerable to the disaster, as a result of their shelter and settlement typologies. Many of the inhabitants of the flooded rural areas resided in one-storey houses, constructed using traditional techniques and materials, such as sun-baked mud-bricks and thatched roofs. The flooding, rainfall and wind caused homes to disintegrate and roofs to blow off. There appeared to be a correlation between the degree of damage sustained and the construction techniques used. As shown by the Rapid Joint Assessment (March 2015), 47% of houses built with fired bricks and CGI roofs reported damage, compared to 71% of those built with sun-baked bricks, and 78% of wood and mud houses.

**EMERGENCY SHELTER PHASE**

The Shelter Cluster, led by the Ministry of Lands, Housing and Development, was activated shortly after the emergency, and a Rapid Joint Damage Assessment was undertaken by various clusters.4

The international organization co-leading the Cluster quickly established a large shelter pipeline, and the first significant shelter distributions took place in early February, with tents and shelter kits being airlifted to areas on the east bank of the Shire River that had been completely cut off by the floods.

During the emergency phase, the government promptly erected tents in the most critical displacement sites, in order to clear the public facilities, particularly schools. The sites were selected without sufficient planning and the tents set up hurriedly, leading to challenges such as overcrowding and gaps in WASH and Protection. Additionally, the distribution of humanitarian aid was reported to create a draw to these sites, partially driven by the underlying poverty and also by the food insecurity, created by flood damage to crops and livelihoods. A further challenge in the response was that initial assessments and distributions tended to neglect IDPs in host communities, which increased the draw to displacement sites and complicated coordination efforts.

4 The Assessment is available at http://bit.ly/2jbPHkw

The Shelter Cluster’s initial strategic objective was to relocate all people from collective centres into planned camps or resettlement areas5. Expected outputs and impacts of the emergency response were:

- 31,636 households provided with tents and NFIs.
- Assessments conducted in all the 15 districts for strategic positioning of camp sites.
- Displaced people in the camp sites to be trained in construction, for dignity and Disaster Risk Reduction.
- Resettlement areas properly laid out.

**EARLY RECOVERY PHASE**

By early March, the government prioritized the closure of camps and the return of IDPs. This change in approach led to a swift re-focusing from emergency operations to early recovery planning within the humanitarian community. As part of these efforts, the Shelter Cluster led the process of preparing a “Durable Solutions Framework” and, where feasible, orientated its own efforts towards providing shelter support in areas of return. Supporting the ability to return was essential to encourage livelihood recovery and to allow collective centres to return to their proper use. The Cluster aimed to provide adequate shelter in the camps, whilst also strengthening the capacity of the displaced population for early recovery, through training on good construction methods and through the provision of construction materials.

The Cluster and the government promoted the use of fired bricks (as opposed to sun-dried bricks) for reconstruction, so that buildings would be more resistant to disintegration6. However, a lack of availability of wood to fire the bricks (or financial resources to purchase fired bricks) led to many households resorting to unsafe traditional building approaches. Some households received shelter assistance from government and NGOs in the form of shelter kits (tools and tarpaulins), tents, or materials to construct temporary timber and plastic-sheet shelters. In assessments conducted by humanitarian organizations, communities expressed a preference for basic materials and tools, to repair or construct core dwellings supplemented by local materials, including earth blocks and grass thatching. This was considered an appropriate and durable solution to their immediate and longer-term shelter needs, which would also allow them to focus on their priorities, i.e. food security and livelihood recovery.

The case studies that follow show two approaches taken by humanitarian organizations. While the first (A.20) was a short-term project focused on the emergency relief and early recovery phase, the second (A.21) was a longer-term recovery programme looking at housing reconstruction, with significant training and Disaster Risk Reduction components.

6 Key Shelter Safety Messages - 2015 Malawi Floods and Storms.
CASE STUDY

MALAWI 2015 / FLOODS

KEYWORDS: Emergency shelter, NFI distribution, Early recovery, GBV risk mitigation

Crisis: Malawi Floods, January 2015

- Total houses damaged: 523,347 houses (Source: Gov. of Malawi).
- Total people displaced: 230,000 in displacement sites and 106,000 displaced in host sites (UNDAC assessment report, 6 February 2015).

Project locations: Chikwawa, Zomba, Mulanje.

Beneficiaries: 1,874 households.

Project outputs:
- 1,224 tents with household NFI kits
- 650 shelter kits
- 500 tarpaulins
- 960 solar powered lamps
- 20 packs of classroom materials

Outcome indicators:
- 100% of shelters distributed were verified as received.
- 67% of respondents living at their (or a new) home site at the time of ex post evaluation (Oct 2015), compared to 4% at time of distribution.

Shelter size: 1 Tent = 18.5 m²

SHELTER DENSITY: 3.6 m² per person (based on national average household size of 5.1).

Materials cost: USD 313 per household.

Project cost: USD 550 per household.

Project Summary:
This project had a relief-oriented and a recovery-oriented outcome objective. Through the provision of tents and shelter-related NFIs, it aimed to meet immediate shelter needs and enabled affected households to move out of gender-segregated collective centres, supporting return and easing overcrowding. In order to support early recovery, tarpaulins and fixing kits were distributed to build or repair shelters, coupled with basic training and tools to assist with reconstruction or earning a livelihood.

Timeline:
- 22 Feb 2015: Distributions of tents completed.
- 23 Apr 2015: Distributions of tents to new caseload with totally destroyed home completed. Distributions of shelter kits and tarpaulins to households with partially destroyed homes completed.

Strengths:
- Reduced issues and risks related to overcrowding in collective centres.
- Facilitated the return to areas of origin / own plots.
- Responded at scale with different modalities.
- Supported early recovery.

Weaknesses:
- The recovery capacity of affected households was not properly understood.
- Lack of appropriate technical training to some recipients of the kits.
- Tarpaulins distributions did not include fixing kits.
- Detailed Post-Distribution Monitoring was not undertaken after the relief distribution.
CONTEXT

For more background information, see overview A.19.

Extreme rainfall in Malawi during January 2015 caused widespread displacement, forcing households to seek immediate shelter in collective centres. In rural areas, the flooding also led to the destruction of harvests and damage to water sources, further exacerbating food-security issues. This created an additional draw to collective centres. Displacement sites became crowded, with a lack of basic services, such as water, sanitation and hygiene, prompting concerns about the outbreak of diseases. The shelter sector was urged to respond in a way that provided immediate lifesaving shelter (alongside appropriate services) and increased the affected community’s capacity for early recovery.

RELIEF PHASE

During the initial phase of this intervention, the organization responded to the immediate shelter needs at collective centres. Due to severe overcrowding, there were concerns about Gender-Based Violence (GBV) and child protection issues, as well as health issues resulting from a lack of basic services. People were living in gender- and age-segregated rooms, and in some instances men were required to sleep outside. Tents and NFI kits, all imported over several rounds, were distributed to households verified as having a totally destroyed home.

The organization aimed to support households as part of a return scheme, motivated by the government’s desire to decongest overcrowded collective centres. For those households who did not want to return to their previous site due to flood risks, the team worked with the local Traditional Authority, the District Government and beneficiaries to identify safer areas of land. In some cases, most notably in the district of Zomba, water inundation prevented households from returning home. In such situations, tents were distributed and implemented in spaces surrounding the collective centres. Due to land restrictions, the number of tents that could be distributed was limited, when compared to the caseload at the centres. In such cases, the organization identified beneficiary families based on agreed vulnerability criteria. As the levels of rainfall dropped and waters receded, distribution teams worked with beneficiary households so that tents could be relocated and families could return to their home sites.

EARLY RECOVERY PHASE

After the initial emergency phase, the project shifted emphasis towards supporting early recovery. In Zomba and Mulanje, shelter kits or tarpaulins were distributed to households with a partially destroyed home. Beneficiary households were able to use tarpaulins and fixing kits to repair and weatherproof shelters, until access to resources allowed them to seek a more durable solution. As part of the distribution, a basic level of training was provided on how to use the items to improve structures. Repairs included fixing damaged external walls and replacing roofs that had blown off.

In Mulanje, during the later stages, households with totally destroyed homes, that were still in collective centres or with host families, were also provided with a shelter kit. In such instances, households received lumber and made basic shelters on their home site. During the ex post evaluation, all interviewed families had completed – or were in the process of improving – their structures. Many of these households also reported they wished to reuse the tarpaulins as roof of the new shelter.

LOCATIONS AND BENEFICIARY SELECTION

The organization focused its efforts in more remote regions and rural communities, where fewer humanitarian actors were operating and gaps in the response were soon identified. Communities were selected in coordination with the government-led Cluster. The district government identified the worst-affected communities that had not yet been reached by other actors.
making assessments available to field teams. Assessment and distribution teams would then work with a local representative for the community, often a camp coordinator. The camp committees, appointed by the district government, would generate a beneficiary list based on agreed criteria: totally or partially destroyed home and, in some situations, additional vulnerabilities. The organization’s assessment team cross-referenced the lists with data compiled by the regional government and also undertook key informant interviews, to verify that the criteria had been applied appropriately and to mitigate selection bias.

**PROJECT IMPLEMENTATION TEAM**

This project was managed by a full-time project manager based in Blantyre, with coordination and strategic responsibilities. This role was filled by a series of overseas staff posted for around four weeks at a time. Two sub-teams (each comprising four staff and volunteers from the organization’s roster) were located in the target districts, to manage the implementation and coordinate with the district government and other actors operating in the same region. Overall, 40 overseas staff and volunteers were involved in the response. At the field level, teams used a high number of local staff and volunteers to assist with the implementation. Some of these were drawn from other organizations, while others were recruited directly from the affected communities, and worked as translators and enumerators, assisted with distributions, training and tent erection. In some instances, agreements were formalized through the creation of MoUs with the appropriate organization. However, in situations where this did not happen, the lack of signed documentation caused issues during the implementation. For instance, newly posted staff or volunteers were not always clear on the agreed per-diem rates for distribution teams. Consequently, the organization became stricter in the formalization of working relationships.

**ENGAGEMENT OF AFFECTED PEOPLE**

Distribution teams from the local community were trained in the erection of tents and were tasked with assisting beneficiary households. These teams also assisted with the relocation of tents from collective centres to households’ home sites. Although the organization coordinated well with the camp committees, more efforts should have been made to work more closely with the wider affected communities, particularly in terms of communication and sensitization with non-beneficiary groups. Several cases were uncovered, during the ex post evaluation, where community members had not fully understood the organization’s goals and mission. In these instances, families who did not receive assistance did not understand the selection criteria, and felt that targeting was political in nature.

**MAIN CHALLENGES**

The distribution of humanitarian aid created a significant pull factor towards collective centres. Identifying the beneficiaries who genuinely required shelter assistance – from those who were trying to access other items – proved problematic. Flooding in Malawi had washed away crops, exacerbating underlying conditions of poverty, and since food and other items were being distributed at collective centres, it was felt that some households had registered in order to qualify for food aid.

This exacerbated problems associated with severe overcrowding. Sanitation was insufficient, families were forced to split, and there were incidences of skin and other communicable diseases. The urgency of lifesaving assistance was stressed in the preliminary response plan, along with the decision to encourage return by supporting families at their home sites, which helped to reduce the draw to collective centres.

Due to underlying resource deficiency and also the scale of the crisis, there was a lack of access to sufficient lumber in the emergency phase, for shelter kits to be easily deployed to a large percentage of the affected population. The deployment of tents enabled rapid distribution, allowing the immediate easing of collective centres. Households could erect them on their land quickly. Where water inundation prevented return to home, tents could be erected temporarily on land adjacent to the collective centres. As the ground began to dry out, tents were moved to beneficiaries’ home sites.

A significant number of families who did not qualify for tents (according to the beneficiary criteria) had a severely damaged house, therefore being exposed to rainfall and high daytime temperatures. These households remained without adequate shelter, as many did not have the resources to make simple improvements and repairs in a timely fashion. This influenced the decision to distribute shelter kits alongside basic training in the second phase, and helped to reduce the issues of inequality felt by those who had not received any assistance.

**WIDER IMPACTS OF THE PROJECT**

A government representative commented that by promoting return to home – and distributing at people’s home sites or assisting with relocation – this project allowed to clear a number of the collective centres and their timely return to their normal uses. This had a positive impact on the wider relief effort, beyond the shelter sector, and supported the early recovery of communities following the flood events.
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS
+ The project provided a mechanism for rapidly reducing the problems associated with overcrowding at collective centres, with the distribution of tents and selected NFIs. It did so by 1) Reducing exposure to vector and water transmitted diseases; 2) Improving privacy; 3) In many cases facilitating the return home and therefore reinstating livelihoods and supporting early recovery; 4) Mitigating risks associated with GBV and child protection, as well as enabling the reformation of the family unit, with parents better able to watch over minors. Qualitatively, beneficiaries reported this to be an important outcome of the intervention, as certain aspects of normal household behaviours could commence.
+ The organization was able to reach a greater number of households and reduced the potential for inequity resulting from the distribution of tents alone, thanks to the distribution of shelter kits or tarpaulins for those with a partially damaged house. This also yielded further positive outcomes in terms of supporting early recovery.

WEAKNESSES
- Vulnerability assessments did not inform an understanding of the self-recovery capacity. Early elements of the response were focused almost solely on immediate relief, and failed to consider the longer-term recovery needs of the affected population. Whilst some beneficiaries were able to use the provision of emergency shelter as a platform for recovery, others were unable to transition towards a more durable shelter within the life cycle of the tent. As tents cannot be easily adapted, this raised concerns that some beneficiaries would become exposed to shelter-related issues at a later date.

LEARNINGS
• Limited availability of food, inflated prices and a reduction in livelihood activities had a significant impact on the early recovery capacity of affected households. If access to food and livelihoods is a known issue, this should be recognized and included in assessments. In this response, evidence suggested that many households were drawn to collective centres as a result of damage to crops, thus the linkages between shelter need and food poverty could be assumed from the outset.
• Vulnerability and capacity assessments should include pre-disaster secondary data, as well as post-disaster secondary and primary data, and this should be factored into any resulting project design. Providing a household with emergency shelter and NFIs can often provide the appropriate platform to begin the process of self-recovery. However, there are contexts when the pre-disaster conditions significantly inhibit the ability of the affected communities to engage in self-recovery. Early, vulnerability-driven, emergency shelter, distributions need to be followed by further capacity assessments and, if appropriate, an additional recovery-oriented component. Although this intervention provided immediate support for those at greatest risk as a result of the displacement, there should have been more recognition of the impact of vulnerabilities on the capacity of households to recover.
• Detailed post-distribution monitoring should be undertaken to recognize specific vulnerabilities early on, and enable the organization to provide an additional level of assistance, or link the most vulnerable beneficiaries with other shelter actors. Although some informal checks were undertaken in the days following distributions, these were carried out with the aim to identify any immediate gaps in provision, or to address aid-related issues. However, the evidence gathered during an ex post evaluation showed that, due to underlying conditions of poverty, many households lacked the material, financial or physical resources to transition towards a more durable form of shelter.
• Shelter kit interventions that do not include the appropriate level of technical training have a significantly lower chance of yielding positive shelter related outcomes (both short- and long-term).

- Adequate technical training on the use of the shelter kit was not always provided to beneficiaries. This was due, in part, to the general lack of understanding (by implementing teams) of techniques associated with the shelter kit. Following the completion of this project, shelter kit trainings were rolled out across the organization’s network of staff and volunteers.
- Tarpaulins were not distributed with a fixing kit, except when part of the standardized shelter kits. Although there were many cases where beneficiaries were still able to use these items to good effect, in some instances tarpaulins were used for non-shelter purposes – such as drying food. This issue may have arisen because beneficiaries did not receive the fixings required to utilize tarpaulins as intended, or due to a lack of training.
- The early emergency phase did not include detailed post-distribution monitoring. This further affected the organization’s understanding of the barriers to early recovery.

MATERIALS LIST

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1 This approach was taken in project A.40 in response to the Ecuador earthquake.
**CASE STUDY**

**MALAWI 2015-2016 / FLOODS**

**KEYWORDS:** Core housing, Housing repairs, NFI distribution, Training, Guidelines, Disaster Risk Reduction

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<tr>
<th>CRISIS</th>
<th>Malawi Floods, January 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL HOUSES DAMAGED</td>
<td>523,347 houses (Source: Gov. of Malawi).</td>
</tr>
<tr>
<td>TOTAL PEOPLE AFFECTED</td>
<td>1,101,364 people (Source: Gov. of Malawi).</td>
</tr>
<tr>
<td>TOTAL PEOPLE DISPLACED</td>
<td>336,000 people (UNDAC assessment report).</td>
</tr>
<tr>
<td>PROJECT LOCATIONS</td>
<td>Zomba, Phalombe and Machinga districts.</td>
</tr>
<tr>
<td>BENEFICIARIES</td>
<td>1,090 households.</td>
</tr>
</tbody>
</table>

1,090 houses benefited from emergency repair and reconstruction activities.

9 model homes built in different communities, to be replicated.

109 cash-for-work grants provided to vulnerable households (10%).

Training provided to local builders and staff (including 66 building supervisors, and three Trainings of Trainers with 30 builders and 8 programme support staff).

Development of a training curriculum for builders.

22m² and 16.5m² (Size of house dependent on family size, assumed at 3.5m² per person).

3.5m² per person.

USD 200 per household.

USD 552 (inclusive of training and dissemination).

The majority of affected households returned to the site of their original dwellings, where possible.

**PROJECT SUMMARY**

The programme aimed to assist flood-affected people to return to their homes, through the repair and reconstruction of houses. This was done through the supply of tools, materials and technical training. It also included training and information sharing to the community on more durable and resilient housing-construction methods.

**STRENGTHS**

- Increased technical skills of local communities in the construction of durable houses.
- The programme provided an affordable housing solution.
- Resources were used directly for housing recovery, accelerating the overall process of recovery.
- Model houses provided a reference for locals to replicate.
- The programme recognized traditional skills and knowledge.
- Capacity-building of local partners.

**WEAKNESSES**

- The project did not cater for all income levels.
- Lack of organizational experience in shelter projects.
- Poor planning led to delays in beneficiary selection.
- Lack of adequate market assessment led to procurement challenges.
CONTEXT
See overview A.19 for background information.

LOCATIONS AND BENEFICIARY SELECTION
The organization selected the three target districts due to the high level of damage and the continued flood risk. Additionally, the local partner had a strong presence in these districts and good relations with the communities.

Priority was given to areas at greatest risk of future flooding (confirmed by flood risk data), where most houses were damaged or destroyed, and that had substantial loss of crops and livelihood and fewest alternative income opportunities.

Household selection was carried out in partnership with the government District Offices and Traditional Authorities and further verified by household visits. Priority was given to the most vulnerable households, based on criteria including: single- and child-headed households, elderly, disabled, households affected by HIV and low-income families with children under 5 years.

The project aimed to advance gender equality and female empowerment against cultural discriminatory norms, involving women in masonry and building workshops.

PROJECT IMPLEMENTATION
Overall, the project was implemented with 52 staff members and builders from a local partner which undertook work at the community level, while the organization provided a total of seven national and international staff for logistical support, coordination and overall supervision.

An initial shelter and housing assessment was undertaken, highlighting that a number of proposed house designs were not affordable and, if adopted, would only support a limited number of families. Given the prevalence of flooding and the need to maximize the scale of the project with the available funds, the organization aimed at supporting families to reconstruct their permanent dwellings, using low-cost, locally available materials, supplemented with in-kind assistance. Technical training and support were also provided to identify and build upon existing best local building practices, and to share this information with the whole community. A series of workshops were held at central locations in the target communities. Two builders from each community in the area joined the workshop along with women and local government staff. The workshop included theory, discussion, site visits and practical exercises, to identify best construction practices. At the end of each day, the learning was recorded and used to develop a training curriculum for other builders and to share this with their whole community. During the week, a complete core house was constructed, along with the provision of a curriculum and supporting communication materials.

The builders were then engaged to construct houses for the most vulnerable families in each of their communities, which also provided a further training opportunity and model for demonstration. Partner field staff and the builders also provided technical support to families during the construction.

COMMUNITY PARTICIPATION
In order to build upon existing knowledge and practice, the organization worked in partnership with communities and local builders, who were engaged from the outset in helping to refine the affordability of the programme and then share their local knowledge on construction practices and building materials. Throughout the programme, the organization maintained this collaboration through local and traditional authorities, focus groups, workshops and household-level support.

COORDINATION
The project worked closely with the Shelter Cluster to agree on the areas where the organization and its partners could work, and to ensure that the approach was in line with Cluster procedures. The Cluster Coordinator attended training sessions and assisted in parts of the training programme. All the materials developed during the programme were shared with the Cluster. District government and traditional authorities were involved in identifying the communities, and communication was carried out through them. The communities were then actively involved in deciding the approach for the project.
The project provided technical solutions, including refinements to traditional house design, so that the roof could continue to be supported by the veranda posts, should the earth walls collapse. During the workshops, emphasis was given to soil selection for making adobe bricks and the correct brick-making processes. The reason why many buildings collapsed was due to the insufficient thickness of the walls, therefore the improved design increased this width (from 10 to 15cm) so that the walls were more stable. It also ensured that internal walls had proper foundations and were connected to the outside walls, to further strengthen the structure.

**DISASTER RISK REDUCTION**

The communities were prone to heavy rains, high winds and flooding. Therefore, Disaster Risk Reduction was very strongly embedded throughout the programme. Community safer-building information was disseminated to educate, inform and provide examples. Other strategies were also encouraged, including planting trees to protect against driving high winds and rain. Trees could also be used as building materials or for firewood. Information was provided on Safer Earth Building for Floods and Rains, as a simple booklet and training curriculum for builders. This included information on hazards, appropriate site selection and construction techniques to reduce flooding in houses, as well as appropriate protection and maintenance of houses and the environment.

**MAIN CHALLENGES**

The organization needed to convince government personnel, politicians and other organizations that houses constructed from local materials could provide a sufficiently durable solution. This challenge was overcome mainly by building model houses that demonstrated this potential. Additionally, extra technical support was brought in during the implementation process, to strengthen the local partner’s capacity.

**WIDER IMPACTS OF THE PROJECT**

The programme explored and built upon existing local knowledge and practices, which enhanced the ownership and commitment of the residents and ensured that any recommendations were site-appropriate. The resources and information produced were shared with the Shelter Cluster, so that other actors could use them. Ultimately, this approach provided a practical, inexpensive and replicable model to respond to similar flood events, in this and other parts of the country.

**MATERIALS**

All materials were purchased from within Malawi, largely through local markets. Timber supplies came from other districts where trees were available for construction use, so as not to damage the local environment.

Materials such as burnt bricks, cement and corrugated iron sheet roofing were beyond the financial means of the poorest households. Therefore, for wider impact, assistance had to be focused on building solutions using local materials that were affordable, replicable and achievable by the most vulnerable and at-risk households.

While earth for brick-making and grass for thatching were locally available, other materials and tools had to be purchased. Communities were offered restricted cash to purchase materials that were not freely available, but there was an overwhelming request for in-kind support due to the distances to markets, the capacity of markets, the cost of transport and the needs of families to focus on agricultural activities.

**HOUSING DESIGN AND TECHNIQUES**

Many houses had survived with little or no damage, even after weeks of standing water, including those constructed using earth brick and render. This is because these traditional houses had raised platforms that protected the core structure from erosion, and the veranda and large roof overhangs ensured that the gables and walls were protected. This design, developed over centuries, provided protection from the elements and, other than some minor repairs to the veranda and walls, allowed many families to return to their homes once the floods had subsided.
STRENGTHS

+ Increased technical skills of local builders in construction of durable houses, thanks to workshops conducted at the community level.

+ The programme allowed for a more durable emergency response, using an affordable solution that would help withstand future flood risks, yet was accessible by the poorest and most vulnerable households.

+ Resources were used directly to support housing reconstruction, accelerating the overall recovery process, instead of providing emergency or transitional support first.

+ Model houses provided a reference for locals to replicate. Communities have started building houses using the safer building guiding principles based on the model houses, which therefore had a wider impact by providing a reference for other members of the community.

+ The programme recognized traditional skills and knowledge as an affordable and effective means of coping with heavy rains and floods, managing to convince locals that these traditional methods were a good alternative to more expensive materials, such as burnt bricks or concrete blocks.

+ Increased capacity of the local partner.

WEAKNESSES

- The programme did not cater for all income levels, as it only provided a low-cost solution and did not consider those who could have afforded more durable housing.

- Lack of experience in shelter projects of the organization’s country programme and local partners meant that this had to be developed during implementation.

- Delays in beneficiary selection and verification process caused by poor planning slowed down the implementation.

- Lack of adequate market assessment. There were some logistical challenges in finding doors and windows, as no large supplier could be found.

LEARNINGS

• Visible sections of the programme distract from wider goals. The hard components of the programme, such as the distribution of materials and the construction of model houses, have the potential to dominate the programme and divert from the wider objective of supporting the whole community (by encouraging safer building practices and supplying relevant information).

• Importance of strengthening the organization’s capacity in varying sectors. The organization’s preparedness needed to be reviewed to better respond to future disasters, particularly with regards to technical support, number of staff, as well as in conducting beneficiary surveys to be used during the identification and selection processes.

• Multisectoral programming, beyond shelter. The programme should have also covered aspects such as restarting livelihoods and food security, to address family needs of those who were keen to return home earlier than others.

MATERIALS LIST PER MODEL HOUSE

<table>
<thead>
<tr>
<th>Ref</th>
<th>Details</th>
<th>Unit</th>
<th>Quantity</th>
<th>Unit cost (MK)</th>
<th>Unit cost (USD)</th>
<th>Total cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RIDGE POLES</td>
<td>Pcs</td>
<td>6</td>
<td>2.30</td>
<td>0.46</td>
<td>13.79</td>
</tr>
<tr>
<td>2</td>
<td>RAFTER POLES</td>
<td>Pcs</td>
<td>30</td>
<td>1.84</td>
<td>0.32</td>
<td>55.17</td>
</tr>
<tr>
<td>3</td>
<td>WALL POST POLES</td>
<td>Pcs</td>
<td>10</td>
<td>1.15</td>
<td>0.21</td>
<td>11.49</td>
</tr>
<tr>
<td>4</td>
<td>BATTENS</td>
<td>Pcs</td>
<td>80</td>
<td>0.46</td>
<td>0.08</td>
<td>36.78</td>
</tr>
<tr>
<td>5</td>
<td>BLACK PLASTIC PAPER</td>
<td>Part Roll</td>
<td>1</td>
<td>6,000</td>
<td>13.79</td>
<td>13.79</td>
</tr>
<tr>
<td>6</td>
<td>TIE WIRE</td>
<td>Roll</td>
<td>1</td>
<td>4.60</td>
<td>0.80</td>
<td>4.60</td>
</tr>
<tr>
<td>7</td>
<td>3” NAILS</td>
<td>Kg</td>
<td>2</td>
<td>4.60</td>
<td>0.80</td>
<td>9.20</td>
</tr>
<tr>
<td>8</td>
<td>TIMBER FOR DOOR (Inc fittings)</td>
<td>Pcs</td>
<td>2</td>
<td>4.60</td>
<td>0.80</td>
<td>9.20</td>
</tr>
<tr>
<td>9</td>
<td>TIMBER FOR WINDOWS (Inc fittings)</td>
<td>Pcs</td>
<td>2,400</td>
<td>16.55</td>
<td>2.83</td>
<td>43.10</td>
</tr>
<tr>
<td>10</td>
<td>EARTH BRICKS</td>
<td>Pcs</td>
<td>2,400</td>
<td>16.55</td>
<td>2.83</td>
<td>43.10</td>
</tr>
<tr>
<td>11</td>
<td>THATCH</td>
<td>Pcs</td>
<td>1</td>
<td>20.69</td>
<td>3.51</td>
<td>20.69</td>
</tr>
</tbody>
</table>

Local materials were provided, as listed in the BoQ below.
CASE STUDY SOMALIA 2011-2013 / DROUGHT + CONFLICT

KEYWORDS: Permanent housing, Resettlement, Advocacy, Infrastructure, Community participation, Land tenure

CRISIS

Complex: Drought (July 2011 - June 2012) and armed conflict. The project started at the peak of the drought in the Horn of Africa.

TOTAL PEOPLE AFFECTED

3.7 million people affected by drought and famine crisis (Source: OCHA, 2011).

1.4 million internally displaced people (ibid.).

PROJECT LOCATIONS

Garowe and Burtinle, Puntland region, Somalia.

BENEFICIARIES

1,200 households (8,400 individuals).

PROJECT OUTPUTS

1,200 permanent shelters built

1,800 individuals benefitting from cash for work (masons, unskilled labourers and carpenters).

Other outputs include: access road, one health centre and one borehole in Garowe, water systems in both sites, child-friendly space, public area and police post in Garowe, 14 sex segregated toilet blocks.

SHELTER SIZE

16m² (4x4m) one room shelters (10x10m plot).

SHELTER DENSITY

2.7m² / person (average household size of 5.9 persons).

MATERIALS COST PER SHELTER

USD 1,693 including labour.

PROJECT COST PER HOUSEHOLD

USD 3,493 including site works, WASH facilities and organizational overheads.

OUTCOME INDICATORS

100% occupancy rate of shelters in both sites. Secure land tenure obtained in both sites.

PROJECT SUMMARY

This was a two-year, multidonor, multisectoral, project aimed at providing a sustainable shelter solution by building 1,200 permanent houses for IDP households in two relocation sites. The shelter programme was linked to Livelihoods, WASH, Health, and Education. The project adopted holistic settlement as well as community-led construction approaches. The organization managed to secure the land and receive additional funding for complementary activities, including infrastructure, facilities and common spaces.

TIMELINE

2. Feb 2012: Recruitment of staff completed.
3. Apr 2012: Typology design agreed and start of land titles negotiations.
7. May 2013: All 1,200 shelters and related facilities constructed, land titles processing completed.
8. Jun 2013: Commissioning of settlements and start of handover of houses and land titles.

STRENGTHS

- Achievement of tenure security and establishment of durable sites.
- Continuous engagement of all stakeholders.
- The selection criteria were established and agreed upon by all.
- Owner-driven approach, transparent and accountable systems.
- Settlement approach, linkages with vocational training and savings groups.

WEAKNESSES

- Staff turnover and lack of flexibility of internal systems.
- Limited female participation and lack of gender analysis.
- The project provided only one-room shelters, that were too small to meet cultural needs.
- Beneficiaries had to be incentivized to participate in the construction.
**Context**

Food security in Somalia had been deteriorating since 2010, with almost all southern regions being affected; famine was declared in the Bay region, for a total of 6.4 million affected people (more than half of the Somali population). Due to this, and the instability and fighting within the country, the number of IDPs in Somalia was estimated to be 1.4 million. The project areas were hosting the majority of IDPs in the Puntland region, which is primarily inhabited by people from the Somali ethnic group (and of Muslim faith). Despite its relative stability, the region had also endured armed conflict.

**Situation During the Crisis**

In the wake of a severe drought and the resulting famine in 2011, the population density in Puntland further swelled, due to the influx of IDPs who were fleeing violence in South-Central Somalia, concentrating around Garowe and Burtinle, and some of the long-term IDPs who had settled in Garowe. Displaced people were searching for life-saving assistance, due to limited access to water, food, health care services, and adequate shelter. The influx of IDPs led to increased tensions between the host community and the new arrivals, as they competed for limited employment, access to state services and scarce resources. In Garowe, there was insufficient or substandard shelter to meet their needs. Additionally, the IDP settlements were unplanned and congested, due to the influx caused by the ongoing drought. In Burtinle, all respondents from a rapid assessment (conducted in two IDP camps) reported that the shelters were inadequate to protect from the weather. The houses were primarily 

**Shelter Cluster Strategy**

The Cluster response strategy in 2012 contained three pillars: 1) Emergency response, 2) Transitional shelter, and 3) Durable solutions. For the emergency response, the Cluster designed a minimum kit, that would be locally procured and stockpiled by Cluster partners in strategic points in Somalia and Kenya. Transitional shelter was provided to stabilized IDP settlements (in Puntland and Somaliland). Interventions ranged from shelter kits, to houses with corrugated iron roof sheets. The third pillar supported voluntary relocation, or return to the place of origin. Due to the presence of returnees from Yemen and Kenya, the Cluster adopted an equality approach, wherein IDPs, returnees and urban poor groups could be integrated. Although this project was initially conceived to fit under the second pillar, it ended up providing permanent shelters with secured land tenure, due to its longer engagement process.

**Project Implementation**

The project was implemented by a contracted team (Finance officer, Accountability officer, Supply chain officer, Project engineers) and with additional staff, brought in on a need basis, including shelter engineers and humanitarian accountability facilitators. A community-based construction approach was adopted, whereby beneficiaries received construction materials and technical support to build their houses. They were likewise responsible for identifying the skilled labour and providing the unskilled labour. Each shelter unit was constructed by an average of five labourers (two masons and three unskilled workers).

**Beneficiary Selection**

The project aimed to provide shelter to people displaced from their homes due to conflict and drought, as well as the urban homeless from host communities. The organization engaged all stakeholders (regional government, elders, religious leaders, community members) in the selection of beneficiaries. The Accountability Officer invited committee representatives from more than 15 IDP settlements in Garowe, explaining the shelter and vulnerability criteria, as well as the selection process. The local authorities were tasked to work with settlement leaders in identifying the most vulnerable residents, based on agreed-upon criteria. Leaflets and posters were distributed in...
the settlement, wherever possible, to inform the inhabitants on these criteria, which included:

- People displaced by the insurgency within the target areas.
- Drought-affected people who had lost their livestock and had no shelter.
- Rural self-settled: those outside the urban or peri-urban areas and those settled individually in small family groups on unoccupied land.
- Households hosting and supporting displaced people with housing challenges.

On top of these, the vulnerability criteria included age, disabilities, homeless widows, female-headed households, large families, diseases, and no access to livelihoods.

The organization carried out an independent verification exercise once the beneficiary lists were submitted. Although most beneficiaries were accepted, a few cases had to be changed in order to include the most vulnerable households. The verified families were issued with a beneficiary ID card, containing the information about their households.

**COORDINATION AND PARTICIPATION OF DIFFERENT STAKEHOLDERS**

The organization held a series of meetings with all stakeholders, to explain the implementation process. Firstly, awareness meetings were conducted with government officials. A design workshop was then initiated to share information with government officials from the Ministry of Interior, Regional Governor and Local Districts, IDP representatives, landowners and clan elders. Different shelter design options were presented, advantages and disadvantages were analysed, and the groups were requested to make recommendations to improve each design. The coordination throughout the project avoided unnecessary conflicts with the communities and other stakeholders, such as clan elders, local authorities, and NGOs.

The coordination with cluster members contributed to ensure that basic standards were maintained, based on cluster guidelines. Effective coordination and information sharing with other sectors, particularly the WASH Cluster, enabled the organization to learn from partners’ experiences and achieve project goals successfully.

**BENEFICIARY ENGAGEMENT**

During construction, the beneficiaries were responsible for ensuring that the houses were built according to their expectations, as well as for receiving and taking care of the construction materials. The community was also able to provide feedback through suggestion boxes in each site. Regular monthly meetings were held with the government and beneficiaries to discuss project progress, achievements, challenges, areas of improvement, as well as follow on the feedback received.

**LAND TENURE SECURITY**

The organization advocated from the beginning of the project to secure land tenure for IDPs, as a precondition for building the shelters. One of the challenges was that the beneficiaries in most cases were from different clans than the land owners. It was decided that these households should be protected and have access to secure land tenure. Government officials agreed to provide titles, as long as the organization would cover the registration costs. The organization publicized the contents of land documents to all stakeholders and further worked with the media to create public awareness, that the shelter units provided under this project were not for rent or sale. The Ministry of Interior reposed any shelter unit that was being sold or rented and re-allocated them to other people still living in the IDP camp. This aimed at discouraging people from infiltrating the system with the aim of making profit.

However, the process to obtain tenure security was lengthy and delayed the project, especially in Garowe. Therefore, the team decided to separate the issues of Burtinle and Garowe, in order to not delay the whole project.

In Garowe, the government was forced to stop the construction of houses after the organization indicated that permanent houses could not be implemented on land with unsecure tenure. The government was then requested to secure freehold land for the IDPs, if these houses were to be implemented as per the agreed design. A meeting was held and broadcast on television, with different sectors of the government, humanitarians, elders, and influential businessmen in the town, during which the government pleaded to allocate special land for the resettlement of IDPs. This resulted into a piece of land...
measuring 1,000m by 150m being allocated to the organization for the shelter project, which was further subdivided into plots of 10m by 10m for each household.

In Burtinle, the process was smoother, as the organization was permitted to build on three existing sites that were identified for the upgrading of makeshift shelters into permanent houses. Ultimately, the project's ambitious goal was achieved in both locations, with land allocated without time limitations and relevant legal titles, signed by the Ministry of Interior and issued to each beneficiary, as part of the handover process. In particular, the titles were legal documents recognized by the society and the sharia courts, and MoUs were signed with the organization. Notably, the project also included women as household title holders.

**MAIN CHALLENGES**

Apart from general security and access constraints for international staff, one of the major challenges was related to staffing, as it was hard to recruit local engineers. The organization therefore suggested to hire engineers from Somalia, but faced stiff oppositions from the Ministry of Labour. This delayed the employment process, though ultimately local engineers were identified.

Another challenge was to uphold humanitarian accountability principles, given that the government tended to assume they would take the lead in communicating with the communities, instead of the organization. More advocacy on the importance of accountability to all stakeholders should have been factored in from the start.

**MATERIALS AND SUPPLY**

All the construction materials were procured locally. The suppliers were provided with information on the beneficiaries, including the resettlement site and plot number. The materials were then distributed to and received directly by the beneficiaries, using supplier’s vehicles.

While the local market in Garowe was able to accommodate the higher demand, the project in Burtinle was partially delayed due to lack of materials. The project team held meetings with suppliers and government officials, in order to have the neighbouring businesses to assist, even though this was initially objected.

Due to the high demand, the price of materials rose. Meetings were held with the settlement leaders and the government officials, to explain that the project budget was fixed by the donor, thus higher prices would mean less beneficiaries. Additionally, in order to reduce the costs, the organization suggested to order goods directly from manufacturers. In the end, both suppliers and government officials agreed to keep the prices stable, unless it was demonstrated that the increase was due to external factors.

**WIDER IMPACTS OF THE PROJECT**

The long-term engagement with the regional government served not only to build the capacity of the government but also to legitimize its efforts and the goals of the overall project, particularly on land tenure issues. The organization helped to establish the government as a credible voice and partner in the well-being of Puntland residents. Reciprocally, the government formally recognized the site in Garowe as “Jilab Village”.

One of the most striking discoveries in the impact evaluation was the dramatic reduction of crime from the IDP camps to the resettlement sites. In both sites, village elders reported only a handful of petty crimes within memory. Women, men and youth unanimously reported feeling safe in all parts of the compounds. Additionally, the evaluation indicated a reduction in gender-based violence, according to the elders and settlement leaders, to which they credited lockable windows and doors in the new shelters.

Finally, the lessons learned from this project were applied in another shelter project that the organization started in Dolow.
WEAKNESSES

- Staff turnover and lack of flexibility of internal systems and processes impacted the project timeline. For example, the regional accountant and his deputy resigned during the implementing period and no replacement was found for long. This affected the timely processing of financial reports and delayed the procurement approval process, as some decisions had to be referred to Nairobi.

- Limited female participation. Gender inclusion in Somalia is bound by cultural and religious considerations, which affect the ability to engage female staff and beneficiaries to the same extent as males. Programmatic gender analysis is necessary and should be built into monitoring systems, in order to tease out power relations and influence biases, flag the level of women participation in the project, and inform actions to improve equitable participation.

- Although in Somalia the common practice is to build several single room shelters (tukuls) for one household, which offer privacy for parents, children, relatives and can accommodate large families, this project provided only one-room shelters. These could not meet these family needs, however, houses could be further expanded on the plot allocated to each family.

STRENGTHS

+ Achievement of tenure security and establishment of a community in the targeted areas. Positioning the Housing, Land and Property focal point to coordinate with the government contributed to the strategic engagement and capacity-building of the authorities.

+ Continuous engagement of all stakeholders to explain the beneficiary selection and the implementation process. This was found to have significantly contributed to managing the expectations of suppliers and local authorities, as well as reduce rumours of theft and misappropriation of project assets and materials.

+ The selection criteria were established and agreed upon by all stakeholders. Beneficiaries were able to understand and explain the reasons why they qualified for assistance; the same was true for those who were not selected. This shows how effectively the information was shared amongst the community, and how transparent the system was.

+ Continued engagement of beneficiaries and owner-driven approach to construction. This included the transparent and accountable systems that were established for the beneficiaries, to be in control of the materials received and accepted. For instance, beneficiaries refused to accept the supply of blocks when these did not meet the agreed upon standards.

LEARNINGS

- Beneficiaries had to be incentivized to participate in owner-driven construction. This required a good understanding of the local context and skilled community motivators. As the interest in participating in manual construction work was low, the project team advised beneficiaries that they would be given priority if they provided labour.

- Being clear and consistent from the beginning on the mandate of the project, and sharing the objectives with relevant authorities, forced them to identify a suitable piece of land.

- The settlement-based approach allowed the team to consider the root causes of vulnerability in this region and to avoid the “bandaid after bandaid after bandaid” situation. The organization has embedded disaster risk reduction and resilience building into its development and humanitarian practice, ever since.

- Linking the programme to vocational training and saving groups helped people to build new skills and earn money. Offering options is important, as it allows community members an opportunity to exercise choice, helping to ensure that they are more than passive actors in the process and can thus find solutions tailored to their needs.

STRENGTHS, WEAKNESSES AND LESSONS LEARNED

MATERIALS LIST FOR ONE HOUSE (ESTIMATED BEFORE COMPLETION)

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Quantity</th>
<th>Rate (USD)</th>
<th>Tot. Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stones</td>
<td>m³</td>
<td>4.4</td>
<td>6.25</td>
<td>27.50</td>
</tr>
<tr>
<td>Aggregates for concrete (gravel)</td>
<td>m³</td>
<td>0.5</td>
<td>10.50</td>
<td>5.25</td>
</tr>
<tr>
<td>Sand</td>
<td>m³</td>
<td>1.3</td>
<td>6.25</td>
<td>8.13</td>
</tr>
<tr>
<td>Portland cement (50kg)</td>
<td>Bags</td>
<td>16</td>
<td>8.00</td>
<td>128.00</td>
</tr>
<tr>
<td>Blocks (40x15x20cm) made from 1:7 mix cement-sand</td>
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<td>700</td>
<td>0.65</td>
<td>455.00</td>
</tr>
<tr>
<td>Stirrups, 6mm mild steel diameter, 6m long</td>
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<td>8</td>
<td>2.50</td>
<td>20.00</td>
</tr>
<tr>
<td>Steel reinforcement 10mm diameter, 12m long</td>
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<td>6</td>
<td>12.00</td>
<td>72.00</td>
</tr>
<tr>
<td>Roofing nails</td>
<td>Kgs</td>
<td>3</td>
<td>2.50</td>
<td>7.50</td>
</tr>
<tr>
<td>Wire nails - assorted</td>
<td>Kgs</td>
<td>6</td>
<td>2.20</td>
<td>13.20</td>
</tr>
<tr>
<td>Galvanized iron sheets, 2.4m long of 28 gauge thickness</td>
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<td>18</td>
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<td>2</td>
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<td>Labour costs</td>
<td>Lump sum</td>
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</table>
OVERVIEW

SOUTH SUDAN 2013-2016 / COMPLEX

CRISIS
Complex, 2013 onwards
Conflict, economic decline and food insecurity provoking protracted internal and cross-border displacement.

TOTAL PEOPLE IN NEED OF HUMANITARIAN ASSISTANCE
10 million (approx. 88% of the total population)

TOTAL DISPLACED PEOPLE
1.83 million¹

SOUTH SUDANESE REFUGEES IN NEIGHBOURING COUNTRIES
1.17 million¹

TOTAL PEOPLE SUPPORTED (shelter-NFI)
748,430 households² (Dec 2013 - Nov 2016)

SHELTER-NFI RESPONSE OUTPUTS (households)
569,422 non-food items
146,917 shelter solutions
32,091 shelter-related NFIs

2 Data reported by the Shelter-NFI Cluster.

SUMMARY OF THE RESPONSE
The complex emergency in South Sudan – after the breakout of violence in December 2013 – created massive displacement and required a flexible approach to planning, coordination and implementation. The response focused primarily on meeting immediate needs through emergency NFI distributions. As the crisis continued, increasing efforts were made to include more durable (emergency) shelter support options for individuals in protracted displacement, particularly within Protection of Civilians sites (PoCs).

Shelter NFI Cluster South Sudan
Coordinating Humanitarian Shelter
ShelterSouthSudan.org

15 DEC 2013

1 15 Dec 2013: Conflict starts in South Sudan.
2 Feb 2014: Humanitarian response scaled up.
3 Sep 2014: 1.43 million people internally displaced; 470,000 refugees in neighbouring countries¹.
4 31 Dec 2014: 267,573 households assisted with shelter-NFI.
6 17 Aug 2015: Agreement on the resolution of the conflict.
7 Sep 2015: Population in PoC sites reaches about 196,000 individuals.
8 15 Dec 2015: 1.66 million people internally displaced; 646,000 refugees in neighbouring countries. 6.1 million people in need of humanitarian assistance².
9 31 Dec 2015: 491,943 households assisted with shelter-NFI.
10 11 Jul 2016: Battle in Juba and resuming of hostilities.
11 30 Nov 2016: 748,430 households assisted with shelter-NFI.
BACKGROUND
Following its independence on 9 July 2011, South Sudan was the world’s newest state, with high hopes for the future. However, civil conflict started on 15 December 2013 and led to massive internal and external displacement of citizens, with extreme violence, harassment, and the deliberate destruction of community and civil infrastructure. Since then, South Sudan has been experiencing a complex crisis: political, economic and security-wise.

The situation in certain locations, such as Greater Upper Nile and Jonglei, continued to decline throughout 2014-2016. Other areas that were considered stable, such as the Equatorias and Greater Bahr el Ghazals, have experienced intense periods of fighting. Rising food insecurity and the effects of conflict on trade and crop planting have further impacted displacement dynamics and mobility shifts.

The August 2015 Agreement on the Resolution of the Conflict was set-back after major conflict episodes in 2016. Crucially, in July 2016, a major battle in Juba killed hundreds and led to thousands fleeing in fear. This led UN, Embassies and NGOs to evacuate or relocate staff.

PROTECTION OF CIVILIANS SITES
Prior to the conflict, the United Nations Mission in South Sudan (UNMISS) bases had hosted civilians under threat of physical violence, with limited humanitarian response. The continual violence from 2013 on caused people to flee to Protection of Civilians (PoC) sites and stay there for far longer than ever before. International debate has arisen over the sustainability of these sites; resources have continually been stretched and it has become obvious that IDPs in PoC sites require long-term assistance.

Initially, response was difficult, as many organizations were development-based and did not have the capacity or security protocols to respond to a quick-onset emergency. Shelter provision has been, for the most part, in concentrated IDP sites, such as the PoC sites in UNMISS bases, and the towns of Mingkaman and Melut — where large numbers of displaced people settled. While the majority of NFI response has taken place along the same lines, people in need across each state have been assisted with NFIs, since the beginning of the crisis.

SITUATION DURING THE CRISIS
There has been little satellite mapping or systematic collection of housing and construction data in the country, nor on the type of and damage to residential dwellings that have been destroyed. Additionally, South Sudanese people normally migrate between different localities, depending on the season or movements of livestock. Sections of certain towns were assessed post-conflict, however the lack of baseline data complicates assessing damage and, therefore, the collection of information is ad hoc. South Sudan is mostly rural, with underdeveloped infrastructure and roads, which have also been damaged through season weather patterns, conflict or neglect. People have generally been assisted in areas far from their homes, where this type of information would be more easily collected. Thus, the focus of assistance in South Sudan has not necessarily been to rebuild shelters, but to provide new emergency shelters in areas of displacement, where people fleeing their homes have found relative safety.

SHELTER-NFI RESPONSE
The Shelter-NFI Cluster has been in existence since 2011, when it had been assisting returnees from Sudan to the newly independent South Sudan. Returnees had differing shelter and NFI needs, according to the stage of their journey, and whether they were returning to rural or urban locations. The Cluster Strategy emphasized development and sustainability interventions, which took into account local context and community dynamics, such as disaster risk reduction for
flooding, livelihoods support and cash transfers, linked to the intended three-year Humanitarian Response Plan.

In the first months after the 2013 crisis, operations were scaled up to respond to the vast increase of needs and scope. At a certain point, the mobile team increased from three members, to more than ten. Further, the team employed four technical experts and engineers in shelter design and site planning, to advise on shelter interventions in concentrated sites.

Given the changing and diverse contexts, a flexible approach to response, coordination and strategy was needed. During 2013-2014, the focus was on emergency shelter designs. Due to the protracted displacement and continued conflict, focus then shifted to more durable solutions. This included developing robust designs and re-enforcing existing shelters, with complementary framing support to enhance structural strength. With the extreme space limitations and increasing populations flowing into the PoCs, communal shelter designs were introduced to ensure space efficiency. At locations where this was not an issue, the Cluster advocated for individual shelters. However, progressive designs have not been an option, due to the protracted emergency.

In 2015, the Shelter-NFI Cluster worked with other clusters to coordinate the delivery of multisectoral survival kits. In May 2015, an emergency airlift operation began, to provide lifesaving assistance to civilians who were cut off due to insecurity and access constraints in Greater Upper Nile. The operation delivered lightweight, portable, survival kits, which included: essential, multisector, items such as mosquito nets; short-maturity vegetable seeds; fishing supplies; water containers, water purification tablets, oral rehydration salts and nutritional biscuits; and kitchen sets. By the end of 2015, agencies had delivered more than 27,800 survival kits in 14 deep-field locations, reaching 140,000 people.

COMMON SHELTER-NFI PIPELINE

Following several years of humanitarian needs in Sudan and the former southern Sudan region, a common Shelter and NFI pipeline was established in 2011, to increase efficiencies of scale, as well as the timeliness and predictability of service to beneficiaries.

With the outbreak of political conflict in December 2013, the pipeline scaled up significantly. With ongoing and protracted conflict, multiple waves of displacement, and the need for continuous service in large displacement sites (e.g., the PoCs), the distribution of NFIs and shelter materials through a common pipeline remained the primary method of delivering humanitarian shelter assistance. As of late 2016, the pipeline has been used to reach 1,585,850 individuals, though in some cases the same people were reached multiple times, due to protracted displacement.

SITUATION IN 2017

By January 2017, more than 2.6 million people have been forcibly displaced from their homes. There were 1.83 million IDPs and 1.17 million others had fled to neighbouring countries (98,000 per month, since July 2016). More than 224,000 IDPs were seeking refuge at existing PoC sites in Bentiu, Unity; Malakal and Melut, Upper Nile; Juba, Central Equatoria; Wau, Western Bahr el Ghazal. The scale and protracted nature of internal displacement into PoC sites is unprecedented, throughout the UN’s history.

The following case studies deal with the set up and operation of the common shelter-NFI pipeline (A.24) and a shelter project and site works conducted in the PoC site in Bentiu (A.25).
**CASE STUDY**

**SOUTH SUDAN 2014-2016 / COMPLEX**

**KEYWORDS:** Pipeline, NFI distribution, Emergency shelter, Procurement

<table>
<thead>
<tr>
<th>CRISIS</th>
<th>South Sudan Civil War, Dec 2013 - ongoing. Complex crisis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL PEOPLE AFFECTED</td>
<td>6.1 million in need of humanitarian assistance and 1.66 million internally displaced, as of December 2015. For more updated figures, see overview A.23.</td>
</tr>
<tr>
<td>PROJECT LOCATIONS</td>
<td>South Sudan, country wide</td>
</tr>
<tr>
<td>BENEFICIARIES¹</td>
<td>579,849 households (2,894,407 individuals, 52% female) assisted between Dec 2013 and Dec 2016</td>
</tr>
<tr>
<td>PROJECT OUTPUTS</td>
<td>438,958 households assisted with NFIs, 140,891 households assisted with shelter materials</td>
</tr>
<tr>
<td>SHELTER SIZE</td>
<td>Shelter designs supported by the pipeline: 72m² for communal shelters (for 32 people), 16m² for individual shelters (for 5 people).</td>
</tr>
<tr>
<td>MATERIALS COST PER SHELTER</td>
<td>USD 110 for individual shelters.</td>
</tr>
<tr>
<td>PROJECT COST PER SHELTER</td>
<td>USD 135</td>
</tr>
</tbody>
</table>

² There is some duplication in these figures, as individuals in protracted displacement may be reached multiple times.

**PROJECT SUMMARY**

Through the management of a common Shelter-NFI pipeline in South Sudan since 2013, this programme has ensured a continual and quality supply of materials for rapid distribution by cluster partners to displaced and conflict-affected communities across the country. The pipeline has helped partners quickly implement emergency shelter interventions, through coordinated planning and prepositioning.

**TIMELINE**

![Timeline Image](image-url)

1. Dec 2014: 54,005 households assisted with shelter materials, 159,725 with NFIs
2. Dec 2015: 36,011 households assisted with shelter materials, 123,654 with NFIs
3. Dec 2016: 50,875 households assisted with shelter materials, 155,579 with NFIs.

**STRENGTHS**

- The timely projection of potential breakages in the pipeline enables swift procurement of items.
- Cost savings, by reducing overheads and staffing needs for partner organizations.
- Standardized the quality of assistance.
- Prepositioning of stocks in strategic locations.

**WEAKNESSES**

- Long lead times, mainly due to administrative processes.
- Lack of flexibility in the items supplied through the pipeline.
- Continuous staff turnover.

People were displaced across multiple sites and large distances across South Sudan (here within the PoC site in Wau, Western Bahr el Ghazal).
LOCATIONS AND BENEFICIARY SELECTION

Humanitarians only engaged in direct construction within Protection of Civilians sites (PoCs), where land was already secured for camp settlement by the UN Mission, or agreed with local government representatives. Other shelter interventions, such as those outside PoCs, have been limited to distribution of materials only, mainly due to unclear land ownership.

Beneficiaries served with materials through the pipeline are identified by State Focal Points in coordination with Operational Working Groups of the Cluster, mostly in priority locations after needs assessments have been performed, and with logistical support prioritized at the Inter Cluster Working Group. Beneficiaries are primarily those residing in concentrated IDP sites, such as the PoCs. Humanitarian agencies focused the assistance to people with specific needs and those who were extremely vulnerable. Gender considerations are integrated in planning, assessments, implementation and monitoring. Populations with specific vulnerabilities (physical disabilities or individuals made vulnerable due to gender or age) are considered and targeted with assistance to meet their needs, using methodologies that ensure access and prevent harassment.

Shelter responses outside of concentrated sites were limited due to transportation challenges and weight of framing materials. Assessments confirmed these locations in most cases have access to local construction materials and are able to construct their own shelters.

BENEFICIARY ENGAGEMENT

Continuous engagement of beneficiaries allowed to incorporate indigenous knowledge into materials specifications. For example, log species suited for a certain area improved the lifespan of shelters and reduced the risk of environmental impacts, including negative effects of insecticides. Shelter-NFI
Interventions are designed around resilience and self-coping mechanisms of communities. Assessment reports are critically analysed to ensure interventions complement, and not compete with or undermine, community resources.

Communities have been empowered to strengthen their capacities through training and community organizing, including participating during distribution and monitoring activities.

Post-distribution monitoring explored in detail the efficiency and effectiveness of pipeline items. Based on the feedback collected, pipeline items specifications were adjusted and improved, to enhance their quality, durability, functionality and service.

**COORDINATION**

Working within the Cluster approach, the Inter Cluster and Operational working groups provide a common platform for different service providers and clusters, such as WASH, Health and Livelihoods, to optimize limited supplies, complement resources, address common issues and improve the quality of the humanitarian response. The pipeline is a reliable resource that supports Shelter-NFI partners and the Cluster for coordination by streamlining responses to avoid duplications.

**RISK MITIGATION**

Shelter-NFI partners work closely with community leadership to ensure interventions are conflict sensitive and respect the ethnic dimensions, privacy, land rights, safety and security of the affected populations. Contingency plans are discussed with communities, taking a holistic view of the context and improving operational preparedness. Methods to make livestock safe, or protect other community assets, are also analysed as a whole, wherever possible.

**PROCUREMENT**

All framing materials are sourced nationally, while cladding materials such as plastic sheets are imported. These stocks are initially stored in central warehouses and then transported to field locations. In some areas with functioning markets, framing materials such as wooden poles, bamboo poles and rubber rope are locally sourced. Items are then transported to strategic locations via road. However, in cases where this is not possible, items are transported via barge or air. To supply framing materials, “no objection certificates” from the government are mandatory to ensure items come from a sustainable source. Additionally, suppliers need to provide logging certificates issued by the Ministry of Environment. The organization also planned to conduct an environmental impact assessment in 2017, to better understand the effects of its shelter programming on the environment.

**MAIN CHALLENGES**

Poor infrastructure and road networks often make getting supplies in dispatch warehouses difficult. This is worsened during the rainy season, wherein most dirt roads are inaccessible. To address this challenge, multiple suppliers have been identified and sometimes items are procured from local markets. The rugged land terrain, insecurity along transport routes, seasonal hazards and vast distances, mean large areas of the country are cut off during the rainy season. Thus, transport to field locations poses a significant challenge. Humanitarians must preposition supplies during the dry season after negotiating for access. In this context, a high level of coordination and emphasis on secure, accessible, common, services is required. In some cases, convoys are arranged and items transported in collaboration with other cluster supplies. After July 2016, access and security challenges increased, including: looting and ambushes on humanitarian convoys; higher number of checkpoints and armed actors demanding road taxes; seizure of private assets; security threats along unpaved roads; and increases in transportation costs.

South Sudan is a landlocked country and does not have a well-developed manufacturing industry. Thus, plastic sheets need to be transported through border posts, where waiting times are often long. Delays in obtaining tax exemption certificates also impact procurement timelines and pose challenges for all partners in the country. The pipeline team must forecast trends and plan procurement activities far in advance, in order to mitigate these delays. As of early 2017, investments were being made in sustainability and resilience activities to improve predictability of supplies for local procurement. For instance, in order to reduce delivery time and support local traders (who often lack resources to supply required quantities), the organization was planning a pilot project to form a consortium of traders in areas with functional markets. The organization was also working on Long Term Agreements and Framework Contracts to ensure a minimum number of supplies are readily available on short notice.

**WIDER IMPACTS OF THE PROJECT**

The common pipeline allows a uniform, coordinated and efficient response. Its use has improved coverage, by enabling organizations to complement their own resources and achieve large-scale interventions, especially in concentrated PoC sites.
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

WEAKNESSES
- Generally, procurement takes between four to five months, largely due to the tax exemption process. While this issue is largely factored into programming, and procurement processes start well ahead of time, it still represents a weakness, due to certain funding mechanisms that do not allow long lead times.

- Lack of ability of the pipeline to support flexible responses, as only a few types of items can be supplied.

- The continuous staff turnover within partner agencies has made it difficult for new staff to understand common pipeline systems and procedures.

STRENGTHS
+ Timely projection of potential breakages in the pipeline, caused by a lack of stock flowing through the pipeline or supply chain and transportation challenges, has enabled timely procurement of items.

+ The common pipeline concept significantly reduces overheads and staffing needs for partner organizations with centralized services. The project has contributed to value-for-money efforts and effectiveness of the humanitarian response as a whole, whilst also helping to standardize the quality of assistance.

+ Prepositioning materials in strategic locations across the country facilitates rapid deployment of life saving items. The availability of a network of contracted transporters has facilitated adequate prepositioning of shelter materials during the dry season, when roads are operational.

LEARNINGS
Post-distribution monitoring, conducted between two to 16 weeks after distribution, highlighted beneficiary feedback and helped to improve the response and planning for future interventions. For instance, in communal shelters, protection and privacy were highlighted as key concerns. To address this, shelters were partitioned into smaller, independent, family units that enhanced privacy, especially for women and girls. This addition, although minor, was not planned and stretched the pipeline resources. Better gender analysis and incorporation in reporting would have provided an opportunity to segregate and analyse information for gender-sensitive responses, and therefore better resource planning.

The pipeline is a common service that reduces procurement burdens on partners, ensures standardized assistance (as per the criteria set by the Cluster), improves coordination and reduces overlaps through a centralized control system.
SOUTH SUDAN 2014-2016 / COMPLEX

KEYWORDS: Emergency shelter, Site planning, Phased construction, Infrastructure, Planned camps

CRISIS
South Sudan Civil War, Dec 2013 - ongoing. Complex crisis

TOTAL PEOPLE AFFECTED
6.1 million in need of humanitarian assistance and 1.66 million internally displaced, as of December 2015. For more updated figures, see overview A.23.

PROJECT LOCATIONS
Bentiu, Protection of Civilians (PoC) site, Unity State.

BENEFICIARIES
105,786 people (47% male; 53% female; with 47% under five years old), relocated across communal shelters, at 45 people per shelter.

PROJECT OUTPUTS
11,778 robust shelters.

SHELTER SIZE
84m² (4.5x21m communal shelters, with partitions to accommodate between 35 and 55 people in groups of 7 to 11 individuals).

SHELTER DENSITY
1.5m² at peak. Shelter occupancy has been variable due to space constraints, with huge influx in PoC caused by repeated insecurity.

MATERIALS COST PER SHELTER
USD 837 (Materials: USD 687, Labour: USD 150 approx.).

REPUBLIC OF THE CONGO

PROJECT SUMMARY
The project constructed 11,778 shelters in the Protection of Civilians site in Bentiu. The project was closely linked with the phasing of a broader USD 18 million project of site works, which converted a camp that seasonably flooded into a habitable site.

STRENGTHS
• Provided shelter secure from violence and localized flooding.
• Effective coordination between all actors.
• Strong forward-planning for procurement and implementation.
• Use of local materials where possible.
• Enhanced cladding with grass to improve comfort and durability.

WEAKNESSES
• Delays due to logistics and weather constraints.
• Assistance was provided only within the site, causing disparities with the populations outside.
• Overcrowding in shelters.
• Issues in timber procurement and poor market analysis.
• Lack of partitions in the initial design.

BACKGROUND

For more information on the context and the shelter-NFI response in South Sudan, see overview A.23.

Before the outbreak of conflict in 2013, the bases of peacekeeping forces – United Nations Mission in South Sudan (UNMISS) – had hosted small populations seeking protection for short periods, with limited humanitarian response. Following the outbreak of conflict, tens of thousands of people fled to – and stayed in – Protection of Civilians (PoC) sites far longer than expected.

Over the course of the conflict, multiple waves of violence affected the town of Bentiu, leading to 120,000 people seeking shelter in the PoC site. Bentiu is extremely hard to access, with a small airstrip of limited capacity, and is inaccessible by road during the rainy season. During the dry season, it is regularly cut off, due to poor security. As a result, all logistics and supplies had to be planned in advance of the wet season, and plans needed to be flexible, to allow for this variable security context.

Humanitarians arrived in Bentiu in January 2014, to provide essential, life-saving, services to the population residing there. In March 2014, the PoC site in Bentiu hosted 11,000 IDPs, with the population rapidly rising to 43,718 by December 2014 as a result of escalated conflict in Unity State. The huge influxes created overcrowding and difficulties in service provision.

In the rainy season of 2014 the site flooded for several months, leaving the camp population trapped, with many parts of the site deep in water. By mid-2014, living space was limited to 9m² per person across the site. Overcrowding was compounded by stagnant water, which worsened living conditions and exacerbated the risk of water-borne diseases, such as cholera. The site itself remained highly insecure, with regular violence outside the PoC – and at times inside, due to ethnic conflict – leading to fatalities throughout the project.

SITE WORKS

To respond to the growing site population and address the issues of localized flooding, during 2015 and 2016, the Bentiu PoC was expanded and rehabilitated over 1.68 million m² (168 hectares). To create better living conditions for people seeking shelter in the site, a massive drainage network was established, based on the Dutch “polder” system. Major works (with 74 pieces of heavy machinery) led to the establishment of a 4m tall berm (mainly for security purposes) and 24m 2 section drainage ditch around the site. This was to prevent surface run-off from the surrounding land. Additionally, a series of drainage ditches and water retention basins were dug. These had large capacity pumps, to remove rainfall from inside the berm.

Although it is widely recognized that camps are an option of last resort, for tens of thousands of residents in Bentiu PoC, conflict meant that there was no other option. However, the site was too small and would flood every year. This required massive expansion and infrastructural works.

Beyond the major site works, the site development project included shelter construction, establishment of water, sanitation and hygiene systems, health and education facilities, alongside other services. Given that the site was already occupied, agencies needed to work together to ensure carefully phased relocation. Shelters, latrines and other structures could not be
erected until ground works were ready and, if they were built before people were relocated, they risked falling into disrepair, or being looted.

**GROWING SITE POPULATION**

The site was designed for 50,000 people with a contingency of up to 75,000 people. As the site population continued to rise, reaching over 87,000 people by July 2015, revisions to site and shelter plans were necessary. In the first phase, there was significant community resistance to the programme, as the population influx meant that the number of people per shelter had to be increased from five to eight. In 2016, this increased further to 11, as the population increased to over 120,000.

**IMPLEMENTING TEAM STRUCTURE**

The lead organization for the site sub-granted to a partner NGO for the shelter activities. The implementing NGO had a Shelter Programme Manager and a Shelter Advisor, and was supported by the lead organization by two deployments of Shelter Cluster rapid response officers. The project also included an implementation and management team with functions such as quality control, cross-sectoral coordination and information management. In addition to project staff, the project implementation team included around 200 camp residents, who were chosen by the community leadership and trained by the organization on shelter design and construction. The construction of shelters was phased employing six different teams (including plot demarcation, digging, erecting skeletons and spraying walls).

Technical supervisors and contractors were recruited by the partner NGO within the PoC sites, with each of the contractors further recruiting a team of labourers to build shelter frames.

**COMMUNITY ENGAGEMENT**

Close engagement with the community leadership was critical for maintaining the ability to operate safely in the camp. It was also essential to enable safe and phased relocations within the site, as new shelters were built.

**PHASING AND COORDINATION**

As people were already occupying the site, a phased relocation process allowed site works to continue, according to an overarching project plan. The site was split into sectors and each sector was moved as the ground works were finished and shelter frames erected.

Relocation could only take place once plots for families and communities had been established, shelter materials had been distributed and construction was completed. Given the limited space, some sectors had to be moved to newly renovated plots before all of the land could be worked on. This made the timing of different activities for the entire site reconstruction project interdependent and highly time critical.

On 21 May 2015, the camp management agency coordinated 160 humanitarian workers in a population verification exercise, recording biometric details and assigning addresses within new areas. Verification was an important first step and helped in demarcating plots and defining movement plans.

Overall, UNMISS, peacekeepers, humanitarians and the authorities had to negotiate between each other and coordinate closely in a very complex military environment and in incredibly harsh conditions, including shrinking humanitarian access and a protracted conflict situation.
CONSTRUCTION PROCESS

Shelter frames were built by contractors and guards were hired to protect the shelter frames from theft, until they were allocated to a household. Once households had been allocated a shelter plot by the organization (in coordination with camp management agencies), they collected a shelter kit from the implementing partner NGO to complete their shelter. Demonstration shelters were built as prototypes and the partner NGO provided technical supervision to households to ensure that the materials were used effectively. For example, care was taken to ensure that plastic sheets were attached correctly. Individuals with identified vulnerabilities, such as disabled persons, pregnant women and the elderly, were provided additional assistance. A timber workshop was set up at the logistics base in the UNMISS site with outdoor storage for 3,000m³ of timber. At the workshop, teams prepared the timber for the structures of the shelters, including treating them with anti-termite solution.

SHELTER DESIGN

The shelter design was discussed with the Technical Working Group in Bentiu and the national Shelter-NFI Cluster before being presented to communities. Local adaptations included the use of elephant grass, which could be harvested by women residing in the site. The windows and doors were also revised to be based on traditional local designs. The shelter design had an estimated life-span of one year, providing displaced households with a solution that is significantly more sustainable than standard emergency shelters built in the country by humanitarians. The design was inspired by the local summer housing solution known as Rakuba.

In 2016, concerns were raised by the community about security in the site and the security of shelters. As a result, the partner NGO started the process of providing doors to shelters which did not have one, starting with the most vulnerable, as identified by protection partners.

To protect from water coming in, it was initially planned to use sand to raise the floors of the shelters, but this proved impossible to procure. Households were therefore encouraged to use white soil to raise their floors instead.

THE SITE IN THE LONGER TERM

Relative stability in the first half of 2016 and the expansion of humanitarian services to wider Unity State led to a net reduction in the number of people in the PoC site. However, a resumption in hostilities following the July 2016 crisis led to a population increase in Bentiu PoC (as of 31 December 2016, the population was 119,853 individuals). The sustainability of this and other PoC sites has been object of debate, due to the limited resources, the protracted nature of the crisis and the need of displaced populations for long-term assistance.

WIDER IMPACTS OF THE PROJECT

Humanitarians have been running similar sets of projects in other PoC sites, such as in Malakal, where the organization has been redeveloping and rehabilitating the PoC site throughout 2015 and 2016. The shelter partner in that site has applied the communal shelter design and aimed to ensure the continued provision of essential emergency shelter services through distributing shelter kits, repairing damaged communal shelters when required and providing assistance to people with special needs to construct shelters.

The implementation of activities across the country has been in line with the Shelter-NFI Cluster objectives and humanitarian best practices, including lessons learned in Bentiu. Through regular monitoring and technical guidance, humanitarian shelter teams have been working to help residents construct their shelters in more durable ways.
STRENGTHS

+ The project provided (relatively) secure shelter from violence and localized flooding.

+ Coordination between all actors was key to the success of such a large-scale programme, which required careful phasing within many constraints.

+ Strong, forward-planning regarding required supplies helped the project team mitigate extreme weather variability and the lack of transport infrastructure. This enabled over 1,000 units to be constructed per week, at the height of the relocation process.

+ Wherever possible, local materials were used. 84,000 bundles of elephant grass, bamboo and garang rope were procured. The local elephant grass was procured from women over a period of two weeks, through a large community-mobilization campaign.

+ The plastic sheet cladding was enhanced with grass to improve insulation and extend the lifespan of plastic sheets.

WEAKNESSES

- Activities were delayed by approximately eight weeks compared to the proposed work plan. This was primarily due to logistics and weather constraints.

- The site became the only significant location where assistance at scale could be provided in the state. This caused disparities between the assistance provided to those living in the PoC and those outside and was one of the causes of population growth of the site.

- The site became very crowded and shelters were relatively small. Although the reasons for the lack of space were unavoidable (both political and financial), the overall density was higher than desirable.

<table>
<thead>
<tr>
<th>Material</th>
<th>Unit</th>
<th>Unit cost (USD)</th>
<th>Quantity</th>
<th>Total cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plastic sheet (4x5)</td>
<td>Piece</td>
<td>15</td>
<td>8</td>
<td>120</td>
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<tr>
<td>Rubber binding rope</td>
<td>Bundle</td>
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</tr>
<tr>
<td>Bamboo poles (bundle of 10)</td>
<td></td>
<td>5.5</td>
<td>10</td>
<td>55</td>
</tr>
<tr>
<td>Timbers 3 x 2&quot; x 3m</td>
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<tr>
<td>Nails 4&quot;</td>
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<td>2</td>
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</tr>
<tr>
<td>Nails 3&quot;</td>
<td>Kg</td>
<td>2</td>
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<td>10</td>
</tr>
<tr>
<td>Nails (roofing)</td>
<td>Kg</td>
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<td>1.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Anti-termite and wood borer</td>
<td>Piece</td>
<td>10</td>
<td>5</td>
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</table>

The site works were based on a Dutch “polder” system. They included 28m2 section drainage ditches, berms, water retention basins, and large volume pumps to evacuate water.

LEARNINGS

• The project demonstrated the value of early collaboration and planning, particularly in such a complex and challenging environment. While shelter activities in 2014 were constrained significantly as a result of a lack of dry space and logistical challenges, the convening of stakeholders and the establishment of a technical working group to plan the redevelopment project in September 2014, as well as the relatively timely procurement of materials during the dry season logistical window, ultimately ensured the success of the project.

• Shelter designs that are meant to accommodate households beyond an acute emergency phase should take into account privacy considerations and install partitions. The communal shelters were initially built without partitions, as the shelter approach was based on individuals-per-shelter (and not households). This was mainly a result of limited space available and the increasing population in the camp.

• For such large projects, it is important to have a proper market analysis and adopt a design that suits locally available materials. Not enough consideration went into the procurement of timber, nor its potential environmental impact. With a non-functional timber market, non-standardized sizes and right species available, it was difficult for the supplier to keep up the demand; compounded by its limited understanding of the requirements, as well as access to appropriate tools and workshops to provide desired sizes.
KEYWORDS: Transitional shelter, Site planning, Training, Local techniques

CRISIS South Sudan refugee crisis, Dec 2013-ongoing

TOTAL PEOPLE DISPLACED
245,298 refugees in Gambella region
48,507 refugees in Tierkidi camp
(as of September 2014, at the start of this project).

PROJECT LOCATION Tierkidi Refugee Camp, Gambella.

PROJECT BENEFICIARIES 835 households (4,125 individuals).

PROJECT OUTPUTS 835 Transitional shelters (Tukuls).

SHELTER SIZE 17.6m² (4.2m x 4.2m).

SHELTER DENSITY 3.5m² per person (average household size is 5).

MATERIALS COST USD 604 per shelter (including labour).

PROJECT COST USD 800 per shelter (estimated).

OCCUPANCY RATE 100% (based on data from camp management agencies).

PROJECT SUMMARY
The project supported the construction of 835 transitional shelters in a refugee camp in the Gambella region, for South Sudanese fleeing conflict, alongside WASH and NFI activities. The shelters were constructed with traditional techniques, locally available materials and a high involvement of the beneficiaries.

CONTEXT
The Gambella region is located in the western part of Ethiopia, next to the border with South Sudan. It has a tropical climate, characterized by hot temperatures, heavy rainfalls from April to September (average of 229mm in July), however it is very dry during rest of the year. Settlement location is therefore particularly important in regards to the rainy seasons. Ethiopia is the country hosting most refugees and asylum seekers in Africa, with a total of 783,401 individuals as of November 2016, mainly from South Sudan, Somalia, Eritrea and Sudan.

STRENGTHS
+ Engagement of all actors in the process.
+ Use of local building practices.
+ Skills and knowledge of workers and refugees were enhanced.
+ Effective coordination and technical assistance.
+ Efficiency and savings.

WEAKNESSES
- Scarcity availability of raw materials.
- Poor site selection.
- Sourcing of the soil for walling delayed the project.
- Limited involvement of women.

The shelter project built shelters in areas D and C of Tierkidi, a planned refugee camp (plan as of January 2015).

SITUATION AFTER THE CRISIS

The conflict in South Sudan erupted in December 2013 and caused massive displacement, both internally, and into neighbouring countries\(^2\). The Gambella region received large numbers of refugees fleeing the conflict in the eastern parts of South Sudan. As of August 2014, there were over 190,000 refugees in the region. This number continued to increase, reaching almost 250,000 individuals by the end of the year.

Several refugee camps were set up and received a high influx of people seeking protection and adequate shelter, along with access to food, water and basic services. At the planning stage of this project, in September 2014, Tierkidi camp was already hosting approximately 48,500 refugees and asylum seekers from South Sudan\(^3\), most of whom were living in emergency tents, in dire conditions.

NATIONAL SHELTER REFUGEE RESPONSE

In 2014, the refugee shelter response in Gambella was led by humanitarian organizations, in coordination with the Administration for Refugee and Returnee Affairs (ARRA) and the lead refugee agency in the country. The strategic focus of the sector for 2015 was to transition from emergency to stabilization, and to relocate refugees away from transit centres and flood-prone camps.

Two types of shelters were provided in camps, 1) Emergency shelters, primarily tents or Bajaj (plastic sheeting on wooden frames), and 2) Transitional shelters, mainly traditional structures known as Tukuls. Upon arrival to the camps, households were registered in reception centres and received the emergency units, which were gradually upgraded or replaced with the transitional options. Implementing partners undertook the sourcing and construction of the superstructures, including roof construction, and the refugees usually complemented the process by mud plastering the walls. This project supported 835 households in the Tierkidi camp, as part of a wider programme that included NFI, water and sanitation components.

\(^2\) For more information on the South Sudanese crisis and shelter response, see overview A.23.


BENEFICIARY SELECTION

The project targeted South Sudanese refugees who were residing in three camps in the area (Tierkidi, Leitchuor and Kule). The targeted households were new arrivals who temporarily settled in the camps, without basic shelter. The lead camp management organization and the refugee government agencies were directly involved in the assessment and selection of beneficiaries, according to common vulnerability criteria. Priority was also given to those who had been living in emergency shelters longer.

The government had already allocated the land for the refugees, which was demarcated in collaboration with ARRA along with camp management actors.

TEAM STRUCTURE AND STAKEHOLDERS’ ENGAGEMENT

For the implementation of this project, the Country Director provided operational oversight, with support of a Grants Management Officer. At the field level, an internationally recruited Area Manager was responsible for the quality of the intervention, supervision of staff and liaison with ARRA, the camp management agency and other stakeholders. A WASH technical specialist and a team leader were also in place and a shelter project manager was being recruited at the time. The field team consisted of more than 30 staff. To ensure standardized application of organizational compliance regulations, accountability and quality of programming across the region, regional and Headquarters staff were also employed as part of this project.

The shelter design was based on the standards in Gambella, used by different agencies, and agreed upon by the Shelter Working Group. Initially, there was resistance from the refugee community about the standard design; the organization, who joined the larger shelter programme at a later stage, therefore faced difficulties in adopting the selected model. This issue was overcome by incorporating the feedback that beneficiaries had given to the Working Group and other agencies. In fact, sector partners, relevant authorities and the beneficiaries, such as elders and vulnerable people, were involved in the design phase.
SHELTER DESIGN AND MATERIALS

The chosen design consisted of a mud tukul (traditional house) with a eucalyptus wooden structure finished with bamboo or grass-thatch matting for the mud render. The shape, as well as the thick mud layer, protect the structure from the elements and helps in maintaining a cooler indoor temperature. The materials, grown in large plantations, are normally abundant in the region. However, a quick market survey showed the possibility of a shortage of bamboo, so the project chose to use primarily grass lattices.

The traditional shelter components included:

- Treated eucalyptus posts (with anti-termite solution using engine oil);
- Bamboo split-bracings, tied to vertical posts with nails, ropes, or grass thatch;
- Mud-plaster made with termite soil;
- Steep-sloped grass roof, on top of treated eucalyptus rafters and purlins (top height 5m);
- Lockable door made from eucalyptus pole frames and corrugated iron sheet;
- 60cm gap above the walls, left open for ventilation.

PROJECT IMPLEMENTATION

After beneficiary selection, the project was implemented as follows:

- Plot demarcation, followed by the mapping of the shelters location.
- A prefabrication workshop was set up, in a warehouse in section D of the camp, to produce the shelter elements, such as doors, poles and frames, in a standardized approach. The capacity of pre-cutting and processing was strengthened to meet the construction targets, within at least three days in advance of the construction.
- The superstructure (frame and roof) was built by a team of carpenters from the host community.
- The bamboo or grass lattice was undertaken by paid refugee workers, skilled in this type of construction.
- The grass thatch was installed by a team of skilled refugee workers. The thatching technique was improved in the second phase of the project, due to the observation of some parts of the roof deteriorating relatively quickly.
- The house was then handed over to the identified beneficiary family.
- Suitable locations for the quarrying of soil was agreed with ARRA and the host community, to ensure that safe practices were adhered to and conflicts with the host community mitigated. The soil was sourced by the refugees themselves, with assistance from field officers.
- Refugees then organized, in self-help groups, and were provided with the necessary local materials, tools and technical assistance to undertake the mud rendering and the raised embankments to protect from flooding.

- Regular technical assistance and supervision was provided, according to the design and agreed criteria.
- Coordination and monitoring of the process was ensured with the organization staff, ARRA and other implementing partners, to address any problems that may have arisen.
- The organization conducted a post-implementation assessment, collecting sex and age disaggregated data. The majority of beneficiaries reported to be satisfied (over 80%) or very satisfied (over 10%) with the shelter design and materials. The results were shared with the Shelter Working Group and its members.

COMMUNITY INVOLVEMENT AND TRAINING

The refugee community was involved in the implementation of the shelters through several tasks, including the overall layout and construction, aiming to incorporate their requirements and ensure a higher sense of ownership and user satisfaction. This was demonstrated in the post-implementation monitoring and by the fact that people personalized their shelters with decorations and paintings, as well as building fences, hedges and gardens on their plots.

During implementation, one of the main challenges was finding skilled workers (like carpenters, masons and foremen). Such technicians were not readily available, especially among the refugees. This was solved by providing on-the-job training and technical assistance throughout the project. Some workers were promoted to “shelter foreman level” due to the technical skills gained during their involvement. The refugee community also participated in the plastering of the shelters according to their traditional construction skills; however, women were not involved, only contributing to the collection of grass for thatching.

COORDINATION

As the proposed programme was implemented in a refugee camp, there was coordination with development actors and programmes, and interventions were designed to be sustainable. Coordination with other agencies and sectors in the camp was essential to avoid duplication and create complementarity, particularly as the organization adopted a “Linking Relief, Rehabilitation and Development” approach. Based on the understanding of the socio-cultural, environmental and technical components of existing building practices, the use of locally available resources and the improvement of traditional techniques was favoured.
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

**STRENGTHS**

- Involvement of all actors and the affected community in project design and implementation.
- The shelters were designed respecting the local building culture.
- The project engaged both the host community and some refugees, to enhance their skills and knowledge of building practices.
- Effective coordination, technical assistance and supervision of works.
- Efficient implementation, minimizing unnecessary expenses. In the first phase, 500 shelters were completed in four months.

**WEAKNESSES**

- Scarce availability of raw materials for the roof, due to seasonality.
- Poor site selection. The second allocated site was at the bottom of a hill, therefore being more prone to flooding.
- Sourcing of the soil for walling. The soil chosen for the construction was far from the site, therefore affecting procurement times and delaying the whole project.
- Women were not involved beyond collecting the grass. Their involvement in activities such as pit excavation and mudding of the shelters would have created income opportunities and help them to support their families.

**LEARNINGS**

- **Engaging affected people at all stages** of a project is key to facilitating implementation, skill transfer, as well as enhancing ownership and building trust.
- **Strong coordination at all levels and technical and managerial support** significantly contributed to the effectiveness and efficiencies of the shelter project.
- **Effective monitoring and documentation of activities** throughout the project can provide lessons for future evaluation and planning of similar interventions.
- **Cash-for-work as a modality of assistance is highly dependent on assessments** and thorough analysis. Without a proper assessment of existing economic activities and household-level livelihoods, as well as careful targeting to ensure that all affected groups can benefit from the assistance, cash may not be effective and exclude certain groups, such as women and persons with limited mobility.
CASE STUDY  TANZANIA 2016-2017 / BURUNDI CRISIS

KEYWORDS: Transitional shelter, Adobe brick making, Training, Community participation

CRISIS
Conflict / political tension, April 2015-ongoing. Refugees from Burundi.

TOTAL PEOPLE DISPLACED
178,000 Burundian refugees in the United Republic of Tanzania (approx. 40,000 households).
326,000 total Burundian refugees in neighbouring countries.
139,000 people internally displaced in Burundi.

PROJECT LOCATIONS
Nyaragusu, Nduta and Mtendeli camps in Kibondo, Kakonko and Kasulu Districts, Kigoma Region, Western Tanzania.

PROJECT BENEFICIARIES
37,760 individuals as of December 2016 (65% female).

PROJECT OUTPUTS
7,552 Transitional shelters (target: 11,000).
30% are duplex shelters for small families/individuals.

SHELTER SIZE
18m² covered living space.

SHELTER DENSITY
3.6m² per person (average household size is five).

MATERIALS COST
USD 395 per shelter

PROJECT COST
USD 500 per shelter (including transport, water trucking, labour, support payment to persons with specific needs and project administration costs).

PROJECT SUMMARY
This project provided durable shelter for refugees fleeing violence in Burundi, across three refugee camps in Western Tanzania. The programme was based on a community engagement model to produce adobe bricks within the camps and was accompanied by training and the production of a technical manual.

CONTEXT
Civil unrest in Burundi has resulted in over 326,000 refugees fleeing to the neighbouring countries of the Democratic Republic of the Congo (DR Congo), Rwanda, Tanzania, Uganda and Zambia. An L1 emergency was declared in April 2015 and escalated to L2 in May, with a Regional Refugee Coordinator appointed. In addition to political instability and increasing violence, Burundi’s deteriorating economy and several natural disasters (floods, landslides, heavy rains and storms) over the last year have contributed to displacement.

The project was implemented in the Kigoma Region, Western Tanzania, which borders Lake Tanganyika to the south and Burundi to the north. The climate is bimodal with a wet season from November to January, reoccurring again from February to April. May to the end of October is primarily dry.
Women were involved in mixing clay, lime and sand (Nduta camp pilot project).

The process of adobe brick making in Nyaragusu refugee camp managed to produce a total of over 11 million bricks, used for the construction of the shelters.

SITUATION BEFORE THE CRISIS

Kigoma is one of the poorest regions in Tanzania and has regularly hosted refugees in Government Gazetted refugee campsites. The road network is poor, with mostly dirt roads, and thus access to the region is difficult, particularly in the wetter months of the year. While larger towns, such as Kasulu and Kibondo have benefited from increased employment and local economies (as a result of the presence of humanitarian organizations), smaller towns near border crossings have seen minimal change. The environmental impact of refugee influxes, particularly on the surrounding forest resources (wood collection), has been significant. The Government of Tanzania was expected to increase focus on the host communities and regional infrastructure.

Prior to the development of an additional four refugee camps throughout 2015 and 2016 near the border with Burundi, all refugees were residing in Nyarugusu. This led to very poor conditions and heightened tensions between groups of longer-term refugees and new arrivals, as the camp, its facilities, and infrastructure, far exceeded its capacity.

SITUATION AFTER THE CRISIS

As of 16 October 2016, Tanzania was hosting more than 240,000 refugees and asylum seekers, mainly from Burundi (171,934) and DR Congo (68,009). The overwhelming majority of these persons of concern resided in one of the three refugee camps in North-Western Tanzania. Due to continued insecurity in Burundi, from April 2015, refugees continued to flee to Tanzania, through over 18 border entry points.

New camps (including Nduta and Mtendeli) were established to allow the decongestion of Nyarugusu through relocation, as well as to provide space for new arrivals. 18,493 Emergency Family Shelters were constructed and 7,466 tents erected.

SHELTER STRATEGY

The national shelter strategy focused on providing more durable and secure transitional shelters, as well as responding to the immediate need for shelter and NFIs amongst new arrivals from Burundi and DR Congo. Shelter responses included standardized family tents, to ensure that persons of concern did not spend more than three days in mass shelters. Emergency shelter construction was prioritized to minimize the use of tents and ensure the rapid upgrading to transitional shelter.

This project aligned to the sector priorities, by constructing transitional shelters in the three camps of Nduta, Mtendeli and Nyarugusu.

BENEFICIARY SELECTION

The older areas of the camps, which had been occupied first, were prioritized for this project. Households living in tents were also prioritized, due to the shorter lifespan of tents compared to emergency family shelters. People with specific need for support, such as single female heads of household, the elderly and those with disabilities, were also identified and prioritized (preventing their engagement in the construction phase).

PROJECT IMPLEMENTATION

Three implementing shelter partners were engaged for this project, one for each camp. The project team consisted of one project engineer, two assistant engineers for each implementing partner and foremen (to directly supervise the construction of the transitional shelters). The shelters were fully constructed by refugees, using local materials, skilled and daily labour from the camp population.

PILOT SHELTERS

During the first phase of the project, a Shelter Working Group was established with the lead agency, implementing partners and other shelter actors, to manage and coordinate the project. Three shelter designs were constructed and tested with the community: 1) traditional clay and stick, 2) complete corrugated galvanized iron, and 3) adobe brick.

The three pilot shelters were constructed and trialled against the following criteria:
1) Economic (cost of materials, benefit to local community, cost to transport materials);
2) Social (maximize ownership, employment, and cultural appropriateness);
3) Environmental impact (materials used from natural resources, distance to transport, impact on host community, water, forest and other environmental resources);
4) Socio-cultural impacts (communities’ ability to self-construct, acceptability of the shelter, protection issues, suitable size, security, plot size and layout, ventilation, storage, cooking and social space).

The adobe brick shelter design was preferred by the community and was deemed the most environmentally harmless and culturally acceptable. The government was very supportive of
this type, as the national environmental policy prescribes limiting the use of native timber. While some partners and beneficiaries initially expressed preference for contracted shelter construction, or other design types, once the shelters started to be completed and community participation increased, this challenge was overcome.

**BRICK MAKING**

Once partners and the community had agreed on the type of shelter and design specifications, community-led brick-making commenced in each camp. Tests were carried out on different lime or cement stabilized bricks throughout the project, as variations in soil were encountered in different areas of the camps. It was initially decided to use lime, but later in the project the team discussed the suspension of lime distributions, mainly due to its scarce effectiveness in such minimal proportions, fear from some users that it would irritate their skin, and the fact that families did not use it at all in one of the camps. Brick-making was carried out in groups of 16 households, overseen by one full-time supervisor (foreman) from the implementing agency. Each group included at least one family with persons with specific needs. The bricks were air-dried and could therefore be produced in any weather, as long as cover was provided during wetter months.

A brick-making guide was also produced in the local language with diagrams to support best practice. These were distributed to communities, with regular community meetings held to ensure continuous targeted messaging. Trainings were held regularly for masons and carpenters, organized in mixed male and female groups to ensure that enough skilled labour was available to support households during the construction phase.

**CONSTRUCTION PHASE**

Each targeted household was assigned a construction plot within the camp. In Nduta camp, the plot was 20x15m, making it possible to construct the new shelter while the family continued to occupy their tent or emergency family shelter on the plot. In Mtendeli and Nyaragusu, the plot was 15x10m, making simultaneous construction more challenging. If living in tents, families were recommended to move their tent to the firebreak (or another space) while construction took place.

Once the bricks were produced and transported to the family plot, a trained builder from the refugee community was assigned to each household to support the masonry work. Households were responsible for mixing mortar, carrying water and other general activities. Following this, a carpenter was assigned to support roof construction. Skilled builders from the refugee community were remunerated through incentive payments. A small payment was also available to support correct finishing of the shelter. For persons with specific needs, cash support was provided to allow the hiring of labour to support the skilled builders. In 2016, approximately 700 masons and carpenters were involved in the project.

**SHELTER TYPES**

The adobe brick shelters were 18m² which accounted for the average household size (five members). Small families and individuals were provided with “duplex” shelters. These were of the same size, with a partition wall in between and two separate doors to each of the rooms. 975 shelters also had a 4m² kitchen attached, built under a different project, which included the use of gas stoves.

The design was slightly adapted for each partner, due to the soil type in each camp and the partner’s capacity.

**LIME STABILIZATION**

Lime for brick stabilization was chosen over cement due to the high content of clay in the local soil, which hampered the efficient mixing with cement. 2x10kg lime bags were distributed to targeted households, while it was agreed that grass could also be used as a straw mix to protect the outside walls from rain – a technique that has long traditions within the refugee communities in the region. Protective gear was not distributed due to the minimal content of lime, which reportedly did not cause concerns by the users.

**PIT RESTORATION**

The soil for making the bricks was mainly extracted on the beneficiaries’ plots. For environmental reasons, a strong focus was put to ensure the restoration of the soil extraction areas in each community. A parallel project implemented by and environment partner, in coordination with Environment and Camp Management actors, planted banana trees in the pits as part of this restoration phase.

**WIDER IMPACTS OF THE PROJECT**

The project set a minimum standard for shelter construction across the refugee camps in the Kigoma region, ensuring equality of assistance and providing households with a durable shelter option which could easily be upgraded through extensions or partitioning. It also resulted in the training of thousands of refugees in lime-stabilized adobe brick making and shelter construction. It had a positive effect on local economies, through encouraging the sustainable use of resources from local and national sources, supporting local businesses, as well as allowing skilled tradesmen and labourers from amongst the refugee population to generate income. The design was also approved and promoted by the government, as it meets the required minimal environmental impact standards, while also providing a durable solution.

Large-scale community engagement, and linkages with other projects and technical coordination through the Shelter Working Group, has brought considerable improvements to living conditions of Burundian refugees in the three camps.

The lessons learned through this first phase also fed into and informed the continuation of the project, which aimed to deliver an additional 3,500 shelters in 2017.
STRENGTHS, WEAKNESSES AND LESSONS LEARNED

**STRENGTHS**

+ **Community mobilization** kept the shelter construction cost low and enabled a large quantity of shelters to be constructed in a short time.

+ **Suitability and flexibility of the shelter design.** The plot size left sufficient space for a kitchen, individual latrine and garden. The shelter was adequately designed for the local climate (hot days and cold nights), with the clay walls providing good insulation and protection. The low-tech, simple technique and the design itself allowed beneficiaries to adapt the shelters, ultimately achieving high flexibility (extensions, partitions, upgrades, etc.).

+ **The chosen materials were easily available locally** (particularly clay and lime), allowing local families to get involved more closely with the brick-making and construction process.

+ **Community sense of ownership and buy-in was significant,** thanks to the comprehensive process of community engagement and consultation over the design and construction of the shelter. This could be seen in the care and pride families took over their new shelters after completion.

**WEAKNESSES**

- **Lead agency and local partners had limited experience in community-driven lime stabilization and brick making.** The identified need for initial sensitization, training and advocacy caused implementation delays of several months. However, pilot brick testing, capacity-building and consistent community messaging increased the quality of the bricks over time and the acceptance and understanding of the technical design.

- **Stabilized adobe bricks can be problematic in the wetter months** and a significant amount of training was required to ensure correct and maintained drainage in the areas surrounding their shelter.

- **Shelter staff in the sector had primarily technical backgrounds** (e.g. engineers) and were in need of additional guidance on the community engagement process of the project. These skills were particularly necessary during the pilot project, as a lot of skilled consultation was required in order to assess the acceptability of the design.

- **The lead agency annual funding cycle and the need to accommodate capacity-building activities, prior to start of the project, led to minor delays and pushed back the delivery date of the project.** However, all materials for the continuation of the project have been prepositioned and no major disruption was experienced.

- **High turnover of staff,** due to short contracts in emergencies, was problematic to ensure project continuity and consistency.

**LEARNINGS**

- Shelter partners working in community projects require training in community mobilization and communication, particularly those with a highly technical background. Piloting the ideas with the community proved beneficial in bringing partners and beneficiaries on board and exemplifying the benefits and shortcomings of certain technical solutions.

- A **realistic time frame is required** to take into account the significant time for planning such a project. Donors, lead agencies and implementing partners’ funding and budgeting cycles have to be seriously considered and discussed openly during the planning phase, to avoid unrealistic expectations and implementation work plans.

- A **large-scale community-driven project requires a very high level of monitoring and quality assurance.** A lack of monitoring can result in poor site demarcation, change of orientation of the shelters, inconsistency in brick quality, refugees paying for support in construction, or the sale of sites to families not targeted by the project, which can all lead to poor quality and heightened protection risks for already vulnerable populations.

- Different organizations have different capacities and networks. As funding was an issue in the early stages of the project, the international organizations were better able to pre-fund their own work and scale-up more quickly. Local organizations were more knowledgeable about the local context and could therefore access materials more cost-effectively. Better synergy and consultations with local partners would have avoided some of the tensions at the project start.

- The **skills, ability and enthusiasm of the refugee community** to participate in shelter construction projects should not be under-estimated. With correct support and facilitation, as well as strong communication and community engagement, a very successful project with a high level of beneficiary satisfaction can be implemented. Feedback and complaints mechanisms also needs to be in place.
**KEYWORDS:** Transitional shelter, Cash assistance, Infrastructure, Training, Guidelines

| --- | --- |
| TOTAL HOUSES DAMAGED | 160,000 severely or partially damaged 11,000 totally destroyed  
(Source: Shelter Cluster factsheet). |
| TOTAL PEOPLE AFFECTED | 974,700 individuals. |
| PROJECT LOCATIONS | Khan Younis, Rafah and Middle Area governorate, Gaza strip, Palestine. |
| BENEFICIARIES | 484 households (2,831 individuals). |
| PROJECT OUTPUTS | 470 Transitional Shelters  
(344 small, 96 medium, 13 large, 14 two-story, 1 pilot).  
235 conditional cash grants. |
| SHELTER SIZE | 44m² up to 7 persons, 53m² up to 10 persons, 62m² for 11 or more, 80m² (two-story shelter for extended families). |
| SHELTER DENSITY | More than 5m² per person. |
| MATERIALS COST PER HOUSEHOLD | USD 4,600 (average). |
| PROJECT COST PER HOUSEHOLD | USD 6,600 (average). |

**PROJECT SUMMARY**

This project provided 470 transitional shelters to the most vulnerable households in Gaza, whose homes were completely destroyed in the conflict, but had sufficient rubble-free space on their land. This assistance allowed beneficiaries to return to their neighbourhoods to begin rebuilding their permanent houses, while living in an adequate, safe and dignified shelter.

**STRENGTHS**

+ Online registration and mobile-app surveys.
+ Durable solution using available materials.
+ Different shelters for a range of family sizes.
+ Hotline and email address for feedback and complaints.
+ Shelters built on beneficiaries’ original plots.

**WEAKNESSES**

- Limited scale compared to needs.
- Long implementation time.
- Some design/building constraints due to limited budgets.

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

1) Project publicly announced.  
2) Home verification visits.  
3) Selection of most vulnerable households.  
4) Shelters completed and inspected by staff.
BACKGROUND TO THE CRISIS

Fifty-two days of intense fighting in July and August 2014, between Israel and Hamas, caused massive loss of life and infrastructure damage throughout Gaza. The incredibly dense urban environment, coupled with Israel’s belief that Hamas was operating in civilian areas, caused significant impact on civilians, infrastructure and land. During the conflict, the Israeli forces instructed the population of Gaza to evacuate a 3km-wide zone. This area was subject to bombardment, and then land forces caused further destruction of houses and property. Many people evacuated to stay with relatives and friends, while others found refuge in collective centres, mainly schools. Given the urgency, people left their homes with minimal possessions.

SITUATION AFTER THE CRISIS

Before the conflict, the majority of homes were built with reinforced concrete and concrete blocks and had access to public services, such as water and electricity. The conflict damaged or destroyed many homes. People either stayed with host families (usually relatives), or constructed make-shift shelters on their land, next to the remains of their house. Some households rented private apartments, but rental space was very limited and anecdotal evidence estimated that prices had doubled since the conflict. Long after the conflict, the majority of affected people remained in approximately 19 collective centres, as well as in rented accommodation and with host families. A minority moved to individual shelters.

Given the time needed to raise the capital for reconstruction and the procurement restrictions in Gaza (e.g. cement and reinforcement bars), people needed a more durable shelter solution until they had the materials and funds to rebuild.

NATIONAL SHELTER RESPONSE

A joint shelter survey was undertaken, to identify the level of damages and needs and inform the reconstruction process. The Shelter Cluster supported the provision of household NFIs and hygiene kits, as well as emergency shelter materials to support individuals in collective centres and those with host families to provide some basic level of privacy in crowded conditions. Materials were also provided to seal off damaged houses. Various forms of assistance for basic repairs and temporary accommodation were provided. Some agencies imported steel caravans (modular buildings) as transitional shelters, which in some cases generated complaints for lacking privacy and adequate drainage, being cramped, too hot in summer and too cold in winter. There were cases where people refused this form of assistance.

BENEFICIARY SELECTION

Through public announcements, household visits and community meetings, the target communities were informed about the project and affected households were invited to register their interest. Beneficiary selection was based on an initial set of criteria:

- House completely damaged and uninhabitable.
- Family owned the land, or had written permission to live on it for at least two years.
- Sufficient space in the plot to build the transitional shelter.

This required various levels of verification, and there were some cases of false documentation, which, amongst other issues, slowed the beneficiary selection and consequently the construction process.

The selection then proceeded on a case by case basis, using criteria based on both pre-existing and conflict-related
vulnerability factors, developed by the organization in collaboration with local communities. These included households with people with disability, young children, female-headed households and low-income households.

**PROJECT IMPLEMENTATION**

The organization and a local partner developed the designs for the shelters through a series of workshops and consultations with the community, before beneficiary selection. A pilot building was constructed for the community to review, and was followed by a technical evaluation, to allow the most efficient, safe, and culturally appropriate construction process to be agreed upon. Extensive feedback sessions with community members also confirmed the agreed solution.

Because of the embargo on most building materials other than timber, the organization decided to use a timber frame structure. The organization then employed a consultant with experience in timber construction, to assist the procurement and implementation of the project. Timber construction was not common in Gaza and, due to the available time and skills, as well as for quality control, the wooden panels were assembled off-site, and construction done using a building contractor. This was selected through a competitive tender process and training was provided by the organization and the consultant. Once the first shelters were built, the contractor worked independently, with supervision from the organization and partners.

The timber frames were constructed in a workshop and then transported by truck to the site. Once erected, the cladding, flooring and roofing materials were delivered and fitted to the frames. Other building trades, such as electricians, plumbers and dry-lining wall fitters completed the building. This combination of on- and off-site method of working allowed for greater speed, efficiency and quality control.

While the organization supplied the buildings, households were responsible for constructing or connecting to a septic tank, as well as for other enhancements. A user manual was provided and training in fire safety was conducted.

A conditional cash grant of USD 500 was also provided to 235 households to enhance their shelters, its amount defined following a market assessment. This component was added at a later stage only for some of the shelters, as funding was received in separate tranches. This form of assistance gave households freedom to choose and install shelter improvements, such as false ceilings, wall partitions, electrical network, CGI roofing in the courtyard, sinks, showers, tiling for toilet, kitchen shelving, window screens and water tank stands.
Each shelter consisted of three rooms – a bedroom, a kitchen and a bathroom – and was designed to meet cultural needs and expectations, especially privacy and dignity of women. This led to a density of more than 5m² per person, above recommended standards. Moreover, the shelter was specifically intended to be upgraded, extended and re-purposed after the estimated life span of five years. The L-shape design with the veranda allows households to easily construct perimeter walls using timber posts and sheeting material, to expand the living space and allow greater privacy and freedom of movement for women. Examples of modifications included installation of electricity, addition of room dividers, construction of external walls, lining of ceilings, landscaping around the shelter and a variety of other decorative and functional upgrades.

INvolvement of Affected People

Key informant interviews with community leaders, other shelter actors and beneficiary households were undertaken and project details were shared through the Shelter Cluster. Focus group discussions (including female groups) were held to discuss shelter needs, designs, and implementation approaches, and the pilot construction facilitated direct discussion and feedback from the beneficiaries. Feedback could also be collected through an email address provided to the families and a toll-free hotline.

Moreover, the organization and partners made regular home visits to beneficiaries, to ensure that they were kept informed and to help with any issues or requests, such as works schedules and where to construct the shelter in the plot. All family members were involved, including children. Gender-balanced teams of trainers allowed both men and women in the family to participate.

RISK Mitigation

Training was provided to avoid risks associated with unexploded remnants of war and also hazardous waste, such as asbestos. The organization initially considered using rubble for construction, but was advised against and therefore avoided using it. The project included the distribution of fire extinguishers and electric lanterns and delivery of fire safety training to all shelter beneficiaries, to reduce fire hazards and improve safety.

Materials and Procurement

Procurement was done locally, since materials could only be purchased in Israel. This was a major constraint for the programme and there was little option to query to the environmental sustainability of the sources. The reliable supply of materials was indeed a major threat to the success of the project. While timber was not initially restricted, later the availability of large-section timber was prohibited. The programme overcame this by redesigning timber frames that could be made by fixing timber studs together to obtain the required size.

Technical Solutions

The project used an adaptation of modern platform-timber-frame construction, where the panels are the load-bearing structure – as opposed to the post-and-beam technique. The shelters were built with floor frames (a frame of floor joists) covered with a decking material, which created the platform. The walls of each level were then fitted to the platforms. To meet the challenge of limited space, two-storey buildings were constructed using this approach. A timber frame structural engineer checked all the designs prior to implementation.

Wider Impacts

This shelter model was highly demanded, as it was viewed as one of the best transitional options in Gaza, while many communities rejected other alternatives such as caravans. By providing a solution to live on their properties, the project also allowed people to restart livelihood activities and rebuild financial and social safety nets within their neighbourhoods of origin, hence supporting recovery.
STRENGTHS

+ **Online registration for beneficiaries** was developed, to avoid the lengthy hard copies application process, and the beneficiary lists were shared with partners to avoid duplication.

+ **The use of timber provided a durable solution using available materials.** This provided optimal space and thermal comfort unlike other shelter options.

+ **Satisfaction surveys on mobile devices** provided a fast and efficient means of information and data collection.

+ **Choice was given to beneficiaries** through the cash grants for shelter enhancement.

+ **Variety of shelter sizes** ensured that the programme catered equitably for a range of family sizes.

+ **A toll-free hotline and email address** allowed a discrete and efficient feedback and complaints mechanism. Complaints were mainly about delays in people’s applications or non-selection as beneficiaries.

+ **The transitional shelters were built on the beneficiaries’ original plots,** helping them restart livelihoods.

+ **Beneficiary willingness to invest in the shelters** with additions and enhancements was a strong indication of their commitment to living in the shelters and to using them for their intended purposes. Two years after the project, the shelters were still used by those who were unable to rebuild.

**WEAKNESSES**

- **Issues with the design** became apparent during the construction, such as the limited internal height. The design has been altered for future responses.

- **The programme did not include external sanitation systems** and required households to be responsible for this. The design provided for a septic tank was not suitable, the cost presented a constraint for low income households, and the availability of materials was a challenge.

- **Limited scale and long implementation times.** Due to the narrow funding, the project had to prioritize beneficiaries, although in fact all affected households were in need of shelter. Even if the transitional shelter solution was not expensive per se, procurement delays – coupled with the decision to achieve a high level of durability and quality for large, extended, families – caused the project to be relatively slow and reach only a limited number of households.

**LEARNINGS**

- **Communities should be involved early on,** and the shelter model should be considered earlier in the process.

- **The organization improved efficiencies and gained significant insights** through this project, such as developing a strong working relationship with the contractor, which helped building its capacity and efficiency.

- **The selection process was refined** based on lessons learned from this project. Given the extensive need in heavily affected border communities, it was challenging to select the most vulnerable people. A more nuanced scoring criteria was developed for future projects that takes into account factors related to socio-economics, health and economic assets.

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**MATERIALS LIST**

| - White wood for the main framework |
| - Flooring plywood 17mm thickness |
| - External cladding from wood (Tongue and Groove) |
| - Internal cladding (Normal Gypsum boards) |
| - Corrugated Galvanized Iron (CGI) for roofing |

| - Vinyl for the Kitchen and bath |
| - Aluminium windows and doors |
| - Tarpaulin |
| - Nails and screws |
| - Painting material |
| - Sink with stand |
| - Toilet bowl |
**OVERVIEW**  

**WHOLE OF SYRIA 2014-2016 / CONFLICT**

<table>
<thead>
<tr>
<th>CRISIS</th>
<th>Conflict, 2011 onwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL PEOPLE AFFECTED</td>
<td>22.3 million</td>
</tr>
</tbody>
</table>
| SYRIAN REFUGEES | 6.2 million (total estimated\(^2\)).  
4.8 million registered in neighbouring countries\(^2\).  
303,000 registered elsewhere\(^4\). |
| PEOPLE IN NEED WITHIN SYRIA | 13.5 million |
| BENEFICIARIES OF THE SHELTER-NFI SECTOR (2015-16)\(^6\) | 770,400 people (Shelter).  
12.7 million people (NFIs). |

\(^1\) For this overview, see all notes on page 125.

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**KEY SHELTER APPROACHES ACROSS COUNTRIES**

- **Emergency tents / emergency shelter kits** (plastic sheeting, poles, fixings, tools).
- **Upgraded shelters in camps** (concrete slabs, kitchens, water and sanitation units per family, prefabricated caravans).
- **Sealing off kits** for shelters and unfinished and abandoned buildings, as part of an emergency response, for interim shelter improvements or as part of climatization packages.
- **Climatization packages** for winter and summer, often with complementary shelter and NFI items and materials.
- **Repair, rehabilitation or “durable upgrades”** of inadequate, unsafe or substandard buildings, often with negotiated tenancy agreements.
- **Cash-for-Rent** schemes.

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**TIMELINE**

1. Mar 2011: Syria Crisis begins; first 5,000 refugees (to Lebanon).
2. Dec 2014: 3.8 million registered refugees.
3. Dec 2015: Over 1 million Syrians arrive in Europe during the year.
7. Sep 2015: 13.5 million people in need (4.5 million in hard-to-reach or besieged areas).
10. Aug 2016: Second “cessation of hostilities” breaks down after a few days.

For shelter projects in the region, see:

A.16 and A.17 in SP2011-12, and A.31 in SP2015-16: Lebanon, on shelter repairs/upgrades and sealing off.
A.9 in SP2013-14: Iraq, on cash/voucher programmes for shelter maintenance.
A.35 in SP2015-16: Iraq, on accessibility upgrades in camps.
A.10 in SP2013-14: Jordan, on transitional shelter in camps.
A.11 in SP2013-14: Jordan, on upgrading of unfinished buildings used as refugee rental stock.
A.12 in SP2013-14: Jordan, on tent recycling projects in camps.
A.13 in SP2013-14: Lebanon, on sealing off kits.
A.14 in SP2013-14: Lebanon, on multisector, mixed-modality interventions.
A.15 in SP2013-14: Lebanon, on conversion of buildings into collective centres.
A.32 in SP2015-16: Lebanon, on fire retardant insulation kits in informal settlements.
A.30 in SP2015-16: Syrian Arab Republic, on repairs and winterization of damaged houses.
THE SITUATION IN THE SYRIAN ARAB REPUBLIC

- In 2016, the Syrian population remained the largest provider of shelter support, with 27% of households hosting people in need in their homes.
- Multiple and temporary displacements were frequent. 50% of IDPs arrived in camps in 2015 from another location of displacement.
- 3,030 collective centres (schools, public buildings, mosques, etc.) have been established in the country.
- Camps and collective centres were the last resort for the population, in tented camps (primarily self-settled), collective centres and makeshift settlements. These typically hosted the most vulnerable IDPs (1.1 million people), as all other alternatives had been exhausted. IDPs tended to move out once other options arose.
- 1.2 million housing units have been damaged and 400,000 destroyed. There has been a 28% increase in damage to housing stock since 2014.
- The high level of damage sustained by residential infrastructure forced populations to reside in substandard, inadequate and unsafe shelter, without access to basic amenities such as electricity, water and latrines, and often without windows and doors. Overcrowding (and shelters housing multiple families) increased protection risks significantly.
- Lack of sites and buildings suitable for transitional shelter solutions that can be implemented by affected populations themselves.
- Restricted admission to neighbouring countries left 170,000 people stranded near borders.

For an overview of the shelter situation and response up to 2014, see overview A.8 in Shelter Projects 2013-2014.

The challenges faced in accessing people in need across the Syrian Arab Republic (Syria) remained high, six years after the start of the crisis. Increased targeting of civilian infrastructure and humanitarian convoys and workers reduced the ability to provide assistance to populations in greatest need. Widespread violations and abuses left populations with little protection, while bureaucratic and administrative barriers hindered timely and effective interventions. The scale and length of the crisis resulted in a convergence of severe needs across sectors, requiring an urgent multisectoral response.

To counter some of these huge challenges, the Whole of Syria Approach (WoS) was developed in 2013, to coordinate humanitarian actors working inside the country with those operational from neighbouring countries and engaged in cross-border assistance. It also sought to support increased access, particularly to besieged and hard-to-reach areas, and to enable the articulation of protection concerns within the country, through three operational hubs (in Syria, Turkey, Jordan).

Focus on coordination and information management at sector/cluster level, across hubs and field locations, along with joint analysis, has reduced duplication, inconsistencies, and gaps in services. From January to August 2016, 1.9 million people were accessed in hard-to-reach locations with multisectoral humanitarian assistance (food security, livelihoods, shelter, NFI, CCCM and nutrition), for at least one month, through a combination of cross-line, cross-border and air-drop operations.

Simultaneously, the 4.8 million Syrian refugees that were residing in the neighbouring countries of Turkey, Lebanon, Jordan, Iraq and Egypt, were requiring ongoing assistance. As their displacement was prolonged, host systems, services and communities went under increasing pressure; inflated rents, increased prices for consumer goods and heightened competition for scarce jobs in struggling economies, all led to growing social tension. These countries also needed stabilization and resilience-building, as a mid- to long-term solution, covered under the 3RP (Refugee and Resilience Response Plan).
A primary challenge in Syria resulted from the shifting conflict and local power dynamics, which led to changes in security and access contexts from one period to the next. This impacted the ability of agencies to effectively provide assistance in a sustained manner, or to respond to sudden and unpredictable displacement. Complex formal requirements and administrative procedures further limited the ability to operate, and had repercussions on scale, scope and timeliness of interventions. Additionally, shelter programmes require consistent access to sites over a longer period in order to ensure effectiveness, but this was hindered by the limited number of NGOs – with constrained operational capacity. Agencies had to adopt a variety of working methodologies, from partnering closely with local organizations, to integrating shelter programmes closely with protection, education or hygiene-promotion activities.

The use of shelter construction activities as an opportunity for skills-building and training supported affected families by offering a possible source of income, at a time when unemployment had exceeded 50% and the poverty rate was estimated at 85%. Due to the scale of needs and constrained access in many locations, prioritizing assistance was necessary – for example, targeting severely damaged houses for winterization repairs, or tailoring assistance to particularly vulnerable groups (such as child-headed households, Palestinian refugees and the elderly). This needed a joint approach, with the involvement of all stakeholders, to conduct structured assessments, which form a key part of the Whole of Syria approach.

The Shelter-NFI Sector in Syria took a dual approach, by addressing emergency needs while promoting household and community resilience amongst displaced, hosting and non-displaced populations. This evolved, since the start of the crisis, from distribution of shelter material (as part of a core relief package), to improving collective shelters and into upgrading unfinished private buildings, in various stages of completion.

Throughout 2016, the Shelter Sector focused on more durable solutions, by supporting owners and tenants to rehabilitate the premises to achieve adequate shelter, targeting houses with minor damage in beneficiaries’ places of origin, while restoring main services and utilities in neighbourhoods for the benefit of the wider community.

In parallel, the Shelter Sector continued to make provisions for contingency planning and emergency response, through tents and kits. Additional areas of the response included strengthening awareness among affected communities of Housing, Land and Property rights through awareness sessions, and supporting ongoing capacity development to enhance governmental response to the IDP crisis.
Almost one in three people in Lebanon in 2016 was displaced from Syria or was a Palestinian refugee. The significant increase in population (37% since the Syria crisis began) burdened existing service provision, infrastructural systems (such as energy and water) and household economies. The most vulnerable Lebanese also started requiring support, as competition for low-cost housing drove rent prices higher. Furthermore, this situation posed a risk to exacerbate existing social tensions within the country’s fragile context.

**SHELTER-NFI RESPONSE IN LEBANON**

An integrated stabilization and humanitarian approach was developed, to reach a broader scope of vulnerable individuals and institutions in need of support, with significant measures for capacity development of institutions and national organizations.

The Shelter Sector aimed to ensure access to adequate shelter, through maintaining or improving shelter standards, improving living conditions within temporary settlements and poor urban areas characterized by large populations of displaced and vulnerable groups, and ensuring public and private institutions were aware of (and responsive to) the shelter situation of these groups. This was undertaken through:

- **Minor repairs or enhancement** to shelters, apartments and houses to meet minimum standards, including prevention and preparedness measures (insulation, fire protection kits, raising of floors).
- **Effectively combined winterization support** for both household items and shelter insulation and weatherproofing, including identification of alternative fuel and stove/heating sources.
- **Cash-for-Rent schemes** to encourage selection of adequate shelter befitting household size.
- **Shelter rehabilitation** in exchange for affordable and secure occupancy.
- **Assisting households living in makeshift shelters and informal settlements to weatherproof shelters and protect against other risks**, to ensure minimum humanitarian standards at settlement level. This included water and sanitation upgrades, drainage, levelling and improving streets and paths, upgrading water points and soakaway pits, and decommissioning defunct latrines.
- **Supporting neighbourhoods and vulnerable communities with shelter and infrastructure projects, through holistic and innovative approaches** that aim to strengthen social cohesion and dialogue. This could be achieved through site-level improvements, upgrading and maintaining little-used buildings as collective centres, establishing Collective Site Management and Coordination structures or neighbourhood committees, or conducting community training on referral systems, conflict mitigation and Housing, Land and Property rights.
- **Enhancing the technical capacity of local institutions to participate in and support shelter assistance activities.**
SITUATION IN JORDAN (654,400 refugees)

- 120,000 people were living in the two refugee camps of Azraq and Za’atari, with another 10,000 people in other camps, as of 2016.
- 83% of Syrian refugees were living outside of camp settings, with the areas containing the highest proportion of Syrian refugees characterized by severe vulnerability.
- 17% increase in the cost of rent and higher prices for consumer goods impacted the host population as well.

SHelter RESPONSE IN JORDAN

Taking a similar approach to Lebanon, Jordan evolved its response to the refugee influx into a resilience-based comprehensive framework, that tied in directly to mid- and long-term national and governorate-level development plans. It aimed to address the key issues facing the estimated 1.4 million Syrians residing in Jordan, of whom 750,000 had already been living there before the crisis. However, as the crisis prolonged and return to Syria was not possible soon, the burden on social structures, public services and host communities began to show, especially as macroeconomic performance was poor. Oversupply of housing at the middle and upper end of the market led to an acute shortage of affordable housing. It contributed significantly to tensions between refugee and host communities, and to the deterioration of living standards, with exploitative subdivision of existing units and conversion of buildings into rental accommodation, with little consideration of household size or standards.

Within camp settings, the main focus was on maintenance and upgrading of existing shelters, facilities and infrastructure, including winterization. Some expansion or relocation could be foreseen, as shelters were upgraded to “permanent” prefabricated caravans.

The 2015 inter-agency Shelter and Settlement Strategy aimed to promote a resilience-oriented approach to both urban and rural settings in Jordan, with a Shelter Task Force developing guidelines for activities. These included conditional cash-for-rent, upgrading substandard shelters, increasing the number of habitable housing units through the upgrading of unfinished buildings, provision of home adaptation and sealing-off kits (particularly for winterization), and raising awareness of rental rights and obligations. In some cases, energy saving measures, such as solar panels, insulation and water savings fixtures, were integrated into the shelter response. This provided additional incentives to landlords to assure adequate, safe, shelter for refugees. Simultaneously, municipal services and infrastructures were strengthened, with prioritization of areas with highest population stresses.

However, with the shelter sector comprising less than 2% of the plan’s budget, a private-sector funding approach was required to provide a source of income for Jordanians (as owners) and vulnerable Syrian refugee and Jordanian families (as renters), accompanied by a programme of legal, institutional and policy reform. The Jordan Affordable Housing Programme commenced, with extensive land, market and financial sector surveys completed. A national design competition was held, and model houses were planned, while workshops with developers were arranged to secure their interest.
SITUATION IN TURKEY (2.74M refugees)

- In 2016, approximately 91% of refugees were residing within the host community, while 9% lived in 25 camps.
- Despite a change in regulation in favour of integration, the large number of refugees accessing social services stretched national structures and capacity to the utmost, particularly in areas which host a high proportion of Syrians; especially in the border provinces and towns.
- While the government provided comprehensive assistance inside camps, including shelter, NFIs and winterization, those living within the host community in urban or rural settings struggled to meet their basic needs, including accommodation, NFIs, electricity and heating.
- The average reported income remained well below the minimum wage. Cost of rent and food accounted for a high proportion of expenditure, meaning that households often resorted to negative coping strategies to make ends meet and prioritized food and rent over their winterization needs.
- Refugees continued to inhabit poorly structured buildings, with about 60% living in shared accommodation, and around 10% in unfinished buildings, barns, shops and other forms of inhabitable dwellings. Approximately 35% of shelter types were in need of some form of repair or rehabilitation, and 82% of households were found in need of winterization assistance.

As with other countries involved in the humanitarian crisis, Syrian refugees in Turkey found themselves in the situation of progressive destitution, as their displacement continued. Unable to become self-reliant due to difficulties in accessing the formal labour market, refugees continued to work informally (often on low salaries), with dependence on assistance from both the government and aid agencies.

SHELTER-NFI RESPONSE IN TURKEY

Multiple and repeated interventions were required in order to provide access to minimum standards, key services and to meet basic needs. Shelter actors operated under the Basic Needs and Essential Services sector, tying together shelter, NFI, sanitation and hygiene and public infrastructure support.

At the start of the crisis, a vast quantity of Core Relief Items was mobilized by the government to respond to the new arrivals, supplemented by partners. This evolved into 3RP partners creating and maintaining emergency stocks of tents, food, NFIs, medicines and equipment for potential influxes, as part of an inter-agency contingency plan. The government continued to play the lead role in the response to Syrian refugees in Turkey.

In the refugee camps, 3RP partners supported shelter, NFI and camp infrastructure in close coordination with the government. Outside of camps, however, due to partners’ lack of access to refugee registration and vulnerability data, the identification of needs among Syrians in host communities remained the biggest challenge. As the crisis continued, organizations began to provide assistance to refugees living outside of camps through NFI distributions and cash-based responses, and more recently direct repairs of shelters (with negotiated lease agreements) in urban and rural areas. Assistance packages comprised emergency, regular and seasonal assistance, with resilience activities focusing on the host community relating to education, livelihoods and social cohesion.

From 2016, winterization support and cash-based interventions were scaled up for refugees outside of camps.

SITUATION AND RESPONSE IN IRAQ

For information on the crisis in Iraq and the shelter-NFI response, see overview A.33.
Looking forward

In early 2017, hosting countries were increasingly looking to stabilize the situation of refugees, as the conflict continued and the opportunity for safe return remained unfeasible. Two-thirds of funds were allocated towards shelter and upgrades outside of camps, for refugees and vulnerable host community members. Mobilizing partnerships to incentivize the supply of affordable housing was another key approach, alongside increasingly durable upgrading and rehabilitation work, including climatization measures, to ensure multi-season habitability. NFI provision was going to target the poorest and most vulnerable refugee populations, with a scaling up of cash-based assistance (e.g. through multipurpose cash grants). In addition, there was a shift towards providing mid- to long-term support, supplementing existing government structures and social capital, as host governments and primary duty bearers developed strategies to address the new and increasingly established refugee populations within their jurisdictions.

Within Syria, host communities remained the largest provider of shelter assistance, highlighting the need for community-focused solutions. Local authorities also expressed the need for more durable shelter options along with emergency shelter support, focusing more on a resilient-oriented type of assistance. In late 2016, the sector also started designing a winterization shelter kit, to be tested during the winter and included in the 2017 shelter response. NFI needs continued to be not uniform and required more flexible and specialized responses, including alternative modalities (e.g. cash and vouchers) where the existing local markets could be supported.

Endnotes

1 Excludes 3.2 million IDPs displaced within Iraq as a result of internal conflict. Calculated as follows: 4.8 million (refugees) + 4 million (affected communities as a result of refugee crisis) + 13.5 million (PiN in Syria – IDP + host/non-displaced)
2 Includes government estimates and unregistered refugees. From 3RP Regional Strategic Overview 2017-2018.
3 Registered refugees, OCHA, December 2016.
4 Registered refugees and asylum seekers in 120 other countries (excluding 3RP countries), as of June 2015. From 3RP Regional Overview 2016-2017.
5 OCHA, December 2016.
6 Data reported to the Shelter-NFI Cluster.
7 Data from Syria Humanitarian Needs Overview 2017, UN-OCHA Dec 2016.
9 Inter-Agency Quarterly Dashboard: Shelter, January – May 2016.
11 As per the minimum wage of Turkey at the time of writing (TRY 1,273). On average Syrians earned 35% below minimum wage. This amount used to be lower in rural areas compared to urban.
12 Assessment carried out between Sep-Dec 2016 by IOM field staff for winterization assistance of 17,500 households, representing 96,386 individuals in Gaziantep, Hatay, Sanliurfa and Adiyaman provinces.
13 Syria Emergency Shelter Sector Factsheet, August 2016.
14 Syria Humanitarian Needs Overview 2017. 69% of affected people in 2016 were living in extreme poverty and 35% in abject poverty.
15 Activated in 2012, the Shelter Sector in Syria consisted of 20 partners as of October 2016, covered 30 out of 272 sub-districts in Syria and completed 147 shelter projects (Syria Hub Shelter Sector Profile Sheet, Oct 2016).
16 Syria Emergency Shelter Sector Factsheet, August 2016.
17 Palestinian refugees residing in Lebanon may have either been displaced from Syria (where they were also refugees) during the recent conflict, or may have experienced historic displacement to Lebanon directly from the Palestinian territories.
18 Lebanon Crisis Response Plan (LCRP) 2015-2016.
19 An assessment in June 2014 indicated that “housing was the most commonly cited sector linked to community tensions by respondents with a total of 81 per cent”, cited in the Jordan Response Plan for the Syrian Crisis 2016-2018.
22 Shelter Sector monthly update October 2016.
Syrian Arab Republic 2015-2016 / CONFLICT

KEYWORDS: Housing repair, Host family support, NFI distribution, Training, Structural assessment, Gender and GBV mainstreaming, Protection


TOTAL HOUSES DAMAGED 1.2 million damaged (approx.).
400,000 destroyed.

TOTAL PEOPLE AFFECTED 13.5 million total people in need within the Syrian Arab Republic (6.3 million IDPs, 5.7 million in acute need), including 6 million children.
6.2 million total estimated Syrian refugees.

PROJECT LOCATIONS Idleb and Aleppo governorates

BENEFICIARIES 873 households (552 in Idleb and 321 in Aleppo).
143 (16.4%) were headed by women.
Total of 5,722 individuals. 51% female and 52% were children (1-18 years of age).

PROJECT OUTPUTS 463 houses rehabilitated - 1,460 winter and kitchen NFI kits distributed - 150 solar panels for lighting installed
305 shelter kits provided - 600 people attended 15 awareness sessions on hygiene and protection.

COSTS Materials cost per household: USD 226.8 / Project cost per household: USD 322.7.

OUTCOME INDICATORS
1/ Beneficiary satisfaction: 46.5% were very satisfied and 35.5% satisfied with the assistance received, in average.
2/ 80% of beneficiaries (IDP and host community) had increased awareness on hygiene and protection topics through mainstreaming activities.

PROJECT SUMMARY Linking relief to recovery, the project targeted IDPs and host communities with repairs to the main damaged parts of their houses and distribution of shelter repair kits, heaters, winterization kits and kitchen utensils. All activities were accompanied by awareness sessions on protection as well as hygiene habits.

STRENGTHS
+ Installation of solar panels.
+ Coal heaters: suitable for indoors, easy to maintain and more affordable.
+ Using local materials and labour.
+ Integration of protection and hygiene components.

WEAKNESSES
- Short duration of the project.
- Limited budget allocated for shelter rehabilitation.
- Delays in the procurement and transport of materials.
- Dissatisfaction of most beneficiaries with the shelter repair kits.
The extent of the damage to private properties, particularly the housing stock, has reached extreme levels within the Syrian Arab Republic. Before the rehabilitation of each house could start, the technical team had to check the local conditions and structural integrity.

CONTEXT
See overview A.29 for more on the crisis and shelter response within Syria and neighbouring countries.

The level of damage sustained by residential infrastructure in high-conflict zones in the Syrian Arab Republic (Syria) is evident in the destruction of homes that have been targeted by aerial strikes, tanks, shootings, and other violent mechanisms. The uninhabitable nature of damaged buildings have forced people to reside in inadequate and unsafe spaces, without access to basic amenities, such as electricity, water, and latrines. Many of these makeshift homes lack doors and windows, causing privacy, safety and protection concerns, and exposing households to theft, abuse, and other hazards. Further, given the reduced housing and the amount of displacement, many homes are inhabited by two or more families.

LOCATIONS AND BENEFICIARY SELECTION
The organization and its local partner identified six regions in Aleppo and Idleb governorates marked by significant destruction, as a result of continued attacks. Due to the unstable security situation, selected sites were constantly monitored prior to launching operations, to ensure they were safe for staff to carry out daily operations.

Residents of the selected regions consisted of both host communities and returning IDPs that hoped for stability and safety for their families. The following vulnerability criteria were used:
1. Families hosting IDPs in their home;
2. IDPs living in unfinished buildings due to inability to afford rent;
3. Home was 40-75% destroyed by the conflict and residents cannot repair it;
4. Household with more than eight members and with teenagers who do not have any privacy;
5. The family has disabled/elderly and does not have the means to cover their needs;
6. Female- and child-headed households.

According to these criteria, the organization identified beneficiaries with the local council, while the field team verified the selected households, by conducting visits before the interventions were performed. A second visit was conducted by the technical team, to check that the conditions and structural integrity of the house would allow the project to proceed with the rehabilitation. Finally, MoUs were signed with homeowners, to make sure IDPs could be accommodated for at least one year after the completion of the works, therefore avoiding the risk of eviction and speculation.

PROJECT IMPLEMENTATION
The project was implemented by the organization from its office in Turkey, in partnership with a local NGO. After recruiting key personnel in the target governorates, the two partners performed community needs assessments, in conjunction with local councils and community groups, and distributed over 500 questionnaires to gather demographic data.

Damage assessments were conducted by a technical team, to categorize homes as mildly, moderately, or severely damaged. Families residing in mildly or moderately damaged homes were provided with shelter repair kits, and received training from the organization’s field staff on how to conduct repairs independently. On the other hand, field staff directly repaired homes identified as severely damaged. Repairs were carried out within six months of the assessments, to ensure that families had adequate living conditions in advance of the winter. Specific repairs for each home were made in accordance with the full-home assessment, on a case-by-case basis, with repairs such as the following:
• Conversion of dirt floors to concrete;
• Repair of plumbing/piping of homes in damaged bathrooms;
• Installation of electrical wiring for solar panels for lighting purpose (150 panels were distributed);
• Latrine installation in homes without functional bathrooms;
• Replacement of damaged doors and addition of locks;
The project included installation of solar panels for selected households.

- Replacement of broken windows;
- Repair of damaged walls and replacement of destroyed walls;
- Repair or replacement of ceilings according to the level of damage.

Beyond the repair of homes, over 50 jobs were created for locals from the target communities who had technical backgrounds, including civil, architectural and electrical engineers, carpenters, constructions workers, plumbers and electricians. Brief training sessions were conducted and maintenance kits were designed and distributed to be used in rehabilitation activities.

Additionally, charcoal or firewood for heating units (Sobas) was distributed to beneficiary families in lieu of fuel, given the high cost and intermittent availability in Syria and the logistical barriers of cross-border procurement and delivery. Beneficiary families received trainings on the safe usage of heating units, to avoid fire hazards and ensure adequate ventilation for poisonous gases produced.

PROTECTION AND HYGIENE COMPONENTS

Given the scale and devastation of the Syrian conflict, the organization decided to extend the reach of its interventions to a wider target, not only the most vulnerable. Throughout this project, protection awareness and education were integrated into the other activities, viewing physical and psychological protection as a priority, alongside other aid and development efforts.

Protection encompasses both physical safety and the emotional and psychological needs of survivors of conflict. The most pressing physical protection needs are from aerial bombardments, warfare, gender-based violence (GBV), as well as environmental conditions, such as exposure to harsh weather, and other factors that contribute to poor physical health, such as poor sanitation. Creating safe havens within communities, wherever possible (homes, schools, underground sites), and privacy within households, by establishing barriers between genders, can address some key elements of protection.

The most relevant emotional and psychological protection efforts for Syrians requires addressing outlets for grief, anger and aggression, frustration over continued poverty, lack of employment opportunities for both men and women, and creating GBV referral pathways and post-traumatic support.

The organization delivered sessions to families receiving shelter and winter kits, and communities at large, based on the results from questionnaires distributed in the project areas. These sessions focused on 1) human rights; 2) anti-violence, and prevention of domestic abuse and GBV; 3) energy sources; and 4) hygiene and health promotion, and the importance of maintaining healthy interpersonal relationships. Particularly, the organization emphasized the need for gender equality, shared decision-making between men and women, early marriage prevention, family planning decisions and mutual and self-respect.

COMMUNITY ENGAGEMENT

The project partners coordinated and collaborated with local authorities and consulted IDPs and vulnerable people, particularly to identify the items for the repairs, aiming to use local materials appropriate for the area. All staff recruited for the implementation were from the target communities, and all activities were implemented side by side with the heads of household. Where possible, beneficiaries contributed to the reconstruction efforts. In post-implementation assessments, they identified that participating in the work had a positive effect on their morale, such as giving them the feeling of being able to take care of their family.

PROCUREMENT AND MATERIALS

All contents of the kits were established after coordination amongst other shelter agencies. Items were procured from local markets as much as possible. Most of the construction materials for rehabilitation were purchased nationally, while the kits and a few other items were purchased in Turkey. The delays associated with transport of procured items across the border delayed the implementation of shelter and NFI distributions. As a result, the bulk of activities were carried out during the winter and were then impacted by slight weather-related delays.

In terms of winterization, coal heaters – which can also burn wood and olive pomace – were chosen due to their affordability, as fuel-burning heaters are expensive to maintain. However, the coal heaters came with safety concerns, as families were unfamiliar with how to operate and maintain them, with the main risk of carbon monoxide poisoning. To address this issue, instructions were printed onto aluminium panels that were later attached to the heaters.

SOLAR PANELS

An interagency study in early 2015 revealed that roughly 83% of the electricity operating in the country before the conflict had been cut off. In severely damaged areas, such as the Aleppo district, only 3% of the electricity sources remained active. Limited access to power has resulted in widespread hardships, including the dependence of hospitals and clinics on costly fuel-powered generators, the inability to resume basic daily activities and the increased risks of theft, kidnappings and violence, due to a lack of lighting. Considering the severity of the impact on people’s well-being, long-term, sustainable and efficient solution to the power shortage were essential. This prompted the organization to install 150 solar panels on the rooftops of beneficiaries’ homes, each providing 100 watts. The free electricity provided by the panels had a significant impact on households’ lives, leading the organization to increase the use of this technology for future responses.