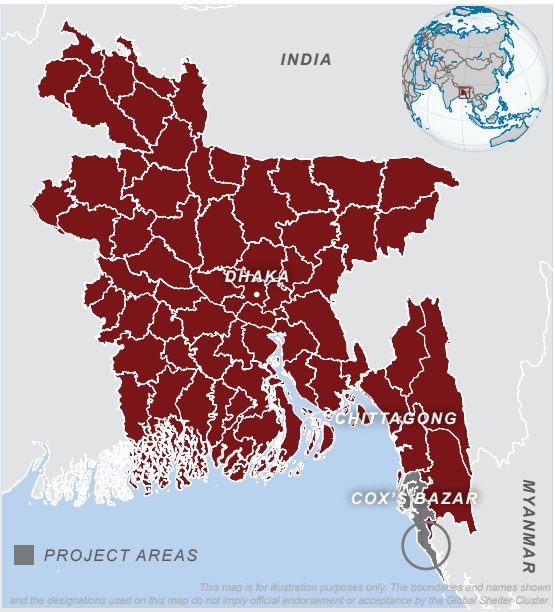
CASE STUDY BANGLADESH 2017–2018 / ROHINGYA CRISIS

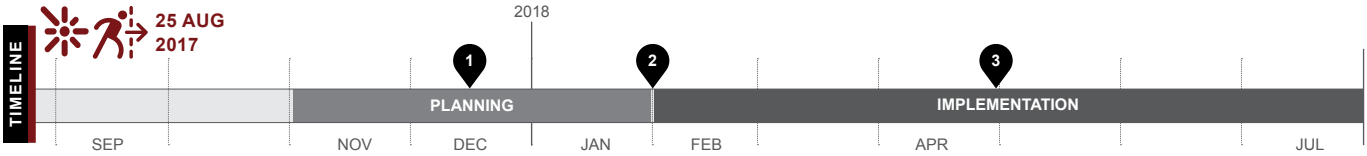
KEYWORDS: Shelter upgrades, Training, Coordination, Scale and coverage, Common pipeline

CRISIS	**Rohingya Refugee Crisis, Cox's Bazar, 25 August 2017–onwards**
TOTAL PEOPLE AFFECTED*	**260,000 households** (1.3 million individuals), including host community
TOTAL PEOPLE DISPLACED*	**134,200 households** (671,000 new arrivals)
SHELTER NEEDS*	**180,000 households** (900,000 individuals)
PROJECT LOCATIONS	Kutupalong-Balukhali Expansion site in Ukhia sub-district; Unchiprang, Shamlapur, Leda and Alikhali sites in Teknaf sub-district – Cox's Bazar district
BENEFICIARIES	**43,789 households** (208,237 individuals). These included 3,777 female-headed HH, 370 youth-headed HH and 291 HH with persons with disabilities
PROJECT OUTPUTS	**43,789 households** received Upgrade Shelter Kits (USKs), were trained and upgraded their shelters and surrounding site conditions **52,987 additional USKs** procured and distributed by Sector partners through the common pipeline **304** staff trained with Shelter-DRR Training of Trainers **106** Rohingya carpenters trained on carpentry
SHELTER SIZE**	**14m²** on average. This programme aimed to reinforce/upgrade existing shelters, not build a new shelter
SHELTER DENSITY**	**3.4m²** per person on average
MATERIALS COST	**USD 155** per household (incl. USD 103 for materials, USD 12 for tools, USD 40 for support costs)
PROJECT COST	**USD 208** per household



PROJECT SUMMARY

This project provided shelter upgrade kits, training and technical assistance to help recently arrived refugees in Cox's Bazar reduce their shelter vulnerability to potential heavy rains and winds. It was part of the second phase of the shelter response, following the emergency distributions after the massive influx in 2017. To meet the scale of needs, resources were carefully allocated to provide shelter materials, tools and technical assistance, and mobilize the community for shelter upgrade and localized site improvements. The organization also provided coordination services and established a common pipeline, which contributed to reaching the Sector target of 180,000 households before the monsoon season.



1. Dec 2017: **Emergency phase distributions completed.**
2. 29 Jan–4 Feb 2018: **First ToT and distribution of USK conducted.**
3. 30 Apr 2018: **First incident due to monsoon weather reported (327 existing shelters damaged).**

* Figures as of 25 Feb 2018. 2018 Joint Response Plan (JRP) for Rohingya Humanitarian Crisis, https://bit.ly/2pKNJmb.

** Shelter/NFI Sector Cox's Bazar, Shelter Survey, August 2018, available at https://bit.ly/2BBWXrh.

STRENGTHS

+ Coordinated approach allowed to reach Sector targets.
+ People-driven shelter upgrading at scale.
+ The project fostered a sense of ownership over the shelters.
+ Effective resource allocation in the short timeframe.

WEAKNESSES

- Insufficient quantities of materials in the kit.
- Limited durability of untreated bamboo.
- Bracing was not favoured by beneficiaries.
- Local languages should have been used more in trainings and IEC.

CONTEXT

For information on the 2017 influx and the Shelter-NFI response, see overview A.13.

The Cox's Bazar district is affected by numerous hazards on an annual basis, such as tidal surge, landslides, flash flooding and cyclones. Heavy rain can commence in April and last through October. Cyclones make landfall in Bangladesh almost every year. There are two cyclone seasons; May–August and October–November.

SITUATION BEFORE THE CRISIS

For decades before 2017, multiple movements of Rohingya from Myanmar to Cox's Bazar occurred. Upon times of influx, ad hoc emergency shelters were built, typically with bamboo and plastic sheeting, leading to commonly reported issues of leaking roofs, lack of privacy and overcrowding.[1]

SITUATION AFTER THE 2017 INFLUX

By the end of December 2017, the Shelter-NFI Sector had carried out comprehensive distributions of acute emergency shelter kits (primarily tarpaulins and rope) and non-food items. The refugees had constructed their own shelters with these items and other materials either gathered or procured on the local market. Continuous new arrivals settled in spontaneous sites over a hilly terrain prone to flood and landslides, increasing the need for humanitarian assistance. Additionally, with the rainy season fast approaching, there was a sense of urgency to continue strengthening preparedness measures and raising awareness among the refugee population regarding potential storms, landslide and flood risks.

As the quality of most emergency shelters after the first phase of the response was very basic, the Sector moved to a second phase focusing on shelter upgrades and localized site improvements, in preparation for the upcoming monsoon and cyclone seasons.

[1] ACAPS/NPM 2017, Review: Rohingya influx since 1978, https://bit.ly/2NgsGmH.

COORDINATION AND COMMON PIPELINE

The implementing organization led the Shelter-NFI Sector with dedicated staff and support from a national NGO. Project staff contributed to joint efforts led by the Sector coordination team and participated in inter-agency assessments to better understand the needs of the new arrivals in terms of shelter and site improvements; and what had already been done by refugees who arrived in 2016 and earlier.

Based on field observation and best practice identified in the sites, the organization also supported the Sector's technical working groups in developing the Upgrade Shelter Kit (USK), providing complementary Information, Education and Communication (IEC) materials, and technical guidance for localized site improvements. Disaster Risk Reduction (DRR) messages were also developed within these materials and the subsequent trainings, which were rolled out by a dedicated training officer who provided support to all Sector partners.

One of the most impactful processes led by the organization in support of the Sector was the establishment of a common pipeline for the USK materials and for some selected NFIs. This was a central repository of Shelter-NFI supplies managed by the organization to procure, store and distribute materials for 96,776 kits to 18 Sector partners, with the coordination team providing oversight.

Project staff also provided assistance and human resources with two key market surveys looking at the impact of the crises on the local bamboo market and how cash could be used in shelter and NFI interventions.[2]

PROJECT GOALS

In the short time leading up to the monsoon season, the organization focused its efforts on training on shelter-DRR and the distribution of USKs, aimed at lessening the shelter vulnerability to potential strong rains and winds, as well as informing the refugees about the risks of other natural hazards.

[1] The report is available at https://bit.ly/2DSohIC.

The project assisted over 43,000 households directly and managed a common pipeline to reach an additional 53,000 with shelter upgrade kits before the monsoon season.

TARGETING

As the entire refugee population – and primarily the new influx – had high shelter-related vulnerabilities, the Shelter-NFI Sector decided to do blanket distribution to all the 900,000 individuals or 180,000 households in need prior to the monsoon season. The procurement and distribution of 180,000 USKs were assigned across Sector partners, with the lead agencies and other large international organizations taking on the bulk of the work. The organization was responsible to cover at least 40,000 households in eight sites and to procure additional 60,000 kits for the common pipeline, to be accessed by Sector partners. A few other organizations used their own resources to cover the remaining caseload.

IMPLEMENTATION AND TRAINING APPROACH

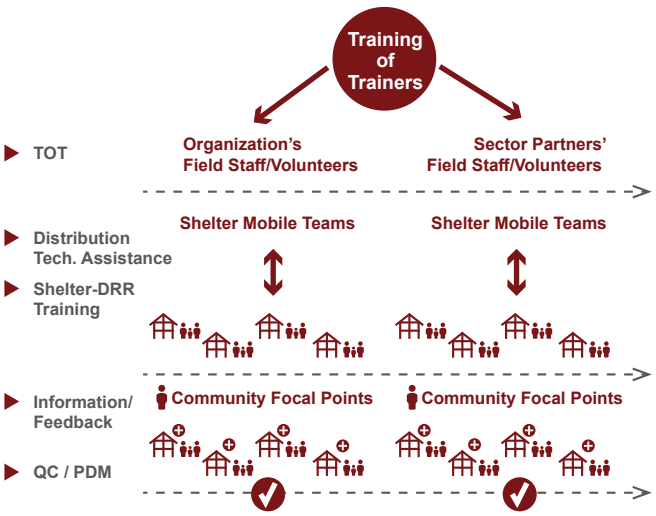
To implement the project at scale in the limited timeframe, the organization established a team of 8 international staff, 12 national staff and 160 field assistants. In order to ensure an effective knowledge transfer and implementation of upgrades at the household level, the trainings were conducted using a cascade approach.

A series of Trainings of Trainers (ToTs) was conducted for shelter field staff and community mobilizers (from both the organization and partners) on shelter-DRR knowledge and facilitation skills. ToTs covered key messages on strengthening roofs, walls, foundations and drainage around the shelter via demonstrations and practical examples, to enable participants to learn by doing.

Trained trainers and community mobilizers carried out **hands-on awareness sessions** to show beneficiaries how to use the items in the kits and how to apply simple DRR measures to conduct shelter upgrades and localized site improvements. These sessions were followed by the distributions on the same day.

Over 100 Rohingya carpenters were identified and trained on shelter-DRR key messages and were then mobilized across the refugee communities. Their role was essential in the awareness sessions and in showing technical interventions to households during the upgrades.

The organization also identified community representatives who acted as information sources and communication focal points between the refugees and the organization, so that updated information, feedback and continuous technical advice could be provided.



A cascade training approach was used to reach the ambitious targets in the short timeline, coupled with continuous technical assistance.

For vulnerable individuals, the organization provided support for transportation, site preparation and shelter set-up through cash for work.

TIME CONSTRAINTS

To upgrade 40,000 existing shelters before the monsoon season commenced in less than four months, the key components of this project – namely community mobilization and household trainings – were planned balancing the need for quality and the time constraints. Training participants were limited to maximum 25 households per session, with a duration of two hours per session. By conducting several ToTs, multiple training teams were deployed and delivered trainings in each site simultaneously.

PROCUREMENT AND LOGISTICS

Given the scale and urgency of the response, the procurement and logistics for the kits, maintaining the common pipeline and ensuring quality control were extremely challenging.

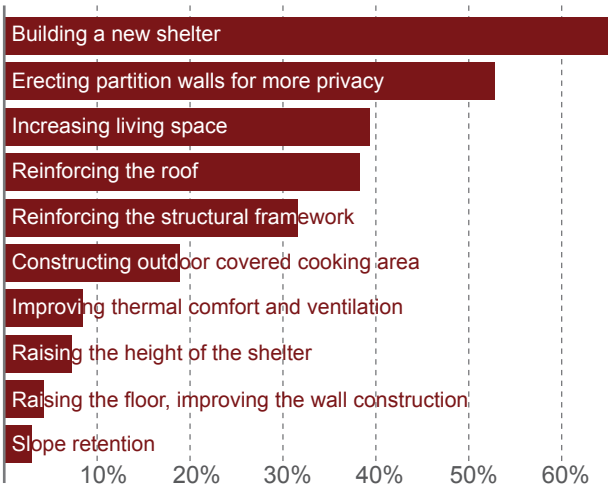
Shelter-grade tarpaulins were procured via various sources, including the organization's regional stockpile, international procurement and in-kind donations. Emergency procurement procedures were used to shorten lead times and additional logistics staff were brought in to support the process.

Bamboo procurement was particularly challenging. A specialist was deployed to address bamboo supply chain issues and travelled to assess several suppliers with confirmed stocks.

Two large logistics hubs were set up close to the refugee settlements. From these, trucks were arranged to deliver the kits to main distribution points within the sites.

The procurement and logistics for the bamboo required for 100,000 kits needed a large dedicated team and the application of expedited procedures. Because of time constraints, bamboo was untreated and often harvested hurriedly.

USE OF THE ITEMS IN THE KIT



This chart shows how USK items were utilized according to the respondents of the shelter survey, who were asked what their top three uses of the kits were.

IMPACT OF TRAINING AND TECHNICAL ASSISTANCE

Post-distribution monitoring indicated that over 99 per cent of the shelters had some sort of improvement after receiving the materials and training. Yet this finding is not surprising given the poor shelter conditions prior to the distributions and the total lack of shelter materials in the settlements. Further, the Sector shelter survey showed that training and technical assistance were well received by refugees, with 99 per cent of those who received it considering it useful or very useful. 97 per cent of the surveyed households also stated that they would like to receive either more training or more technical assistance. During focus group discussions, respondents identified three main learning elements from the training: tie down of the roof, anchoring and improvement of foundations, and making strong connections. On the other hand, bracing was considered less relevant.[3]

[3] Shelter survey, August 2018.

By involving refugees throughout the implementation, the project helped generating a sense of ownership over the shelters and their surrounding environment.

WIDER IMPACTS

The coordinated response with Sector partners enabled to achieve full coverage at scale. By setting up the common pipeline, developing IEC materials and offering ToTs in coordination with the Shelter-NFI Sector, this project contributed to achieving shelter upgrades for over 180,000 households as a joint Sector-wide effort.

The communication, mobilization and training components of this project promoted a sense of ownership towards refugees' own shelters and the surrounding environment, facilitating further maintenance and upgrade works even after project completion. DRR and technical skills learnt in the training were also used in other interventions, such as the improvement of mosques and community buildings.

Although the training and technical assistance were well received, many refugees thought the materials in the kits were not enough and generally did not consider bracing as relevant.

To reach over 43,000 households in about four months, resources were well allocated with a combination of in-kind and technical assistance. Hands-on sessions with maximum 25 participants were conducted for refugees on the day of the distribution. The training was generally welcome and allowed over 99 per cent of beneficiaries to make improvements to their shelters.

STRENGTHS, WEAKNESSES AND LESSONS LEARNED

WEAKNESSES

- Insufficient quantities of materials. Under the guidance of the Sector's technical working group, the kit composition was optimized for upgrading existing shelters and not for building a whole new shelter. Quantities of materials were agreed considering the resource limitations among Sector partners and realistic procurement lead times. However, there were complaints from beneficiaries and Sector partners that the USK contents were not enough.

- Limited durability of untreated bamboo. Bamboo can be a durable construction material if selected and treated properly. Due to the time pressure, various types of bamboo were procured, often harvested too early and untreated. Further, bamboo posts were inserted directly into the ground, exposing the bamboo to mold and termite attacks. It was recognized that the assistance provided under this project would not be a durable option, requiring a further phase of shelter assistance.

- Bracing was not favoured by beneficiaries. Thanks to the training and technical assistance, most of the key messages on shelter-DRR techniques were implemented by the refugees, except for bracing. This was mainly due to cultural preference and the limited number of available bamboos, as well as the limited covered space (as bracing reduces internal space if bamboos are installed inside the shelter frame).

- Language in trainings and information materials. The ToTs were conducted in a mix of English and Bangla. For a better understanding of the contents, Bangla should have been used in most of the ToT curriculum. Additionally, IEC materials should have been produced with two languages together – Rohingya language for refugees and Bangla for staff.

CONTENTS OF THE UPGRADE SHELTER KIT

Items	Qty	Unit cost (BDT)	Unit cost (USD)	Total cost (USD)
Shelter Materials				
Tarpaulin (4x6m)	2	2,014	24.00	48.00
Bamboo (large)	4	300	3.58	14.30
Bamboo (small)	60	40	0.48	28.61
Sand bag (polyprop.)	30	20	0.24	7.15
Tie wire	1	40	0.48	0.48
Rope (thick), 25m	1	120	1.43	1.43
Rope (thin), 30m	1	72	0.85	0.85
Nails, 3', 0.25kg	1	45	0.54	0.54

STRENGTHS

+ Coordinated approach. The project was well coordinated under the Shelter-NFI Sector, which as a whole was able to deliver standardized assistance to over 180,000 households within the planned timeframe.

+ People-driven shelter upgrading at scale. The project primarily aimed at facilitating learning and knowledge exchange towards refugee populations to enable shelter upgrade for a very large population. Through a people-centred approach, the three main components of the project (training, community mobilization and distribution) were interwoven, complementing each other.

+ Thanks to the high involvement of the refugees, **the project fostered a sense of ownership over the shelters.**

+ Effective resource allocation. In light of the short project timeline and the scale of needs to be covered before the monsoon season, available resources were well allocated. Materials in the USK were maximized in terms of viable procurement lead time, and as many field staff as possible were hired and trained to achieve the targets of training and community mobilization.

Items	Qty	Unit cost (BDT)	Unit cost (USD)	Total cost (USD)
Household Toolkit (1 kit for 5 HH)				
Claw hammer	2	150	1.79	3.58
Hand saw	2	120	1.43	2.86
Pliers	2	180	2.15	4.29
Machete	2	220	2.62	5.24
Shovel	2	200	2.38	4.77
Hoe	2	300	3.58	7.15
Digging post	2	340	4.05	8.10
Bamboo Basket	5	120	1.43	7.15
Neighbourhood Toolkit (1 kit for 100 HH)				
Wheelbarrow	2	2,850	33.97	67.94
Sand bag (polyprop.)	500	20	0.24	119.19
Shovel	5	200	2.38	11.92
Hoe	5	300	3.58	17.88
Digging post	5	340	4.05	20.26
Bamboo basket	10	120	1.43	14.30
Steel pan	10	250	2.98	29.80

LESSONS LEARNED

- **Balancing resources.** Resource allocation was of paramount importance in project design (i.e. cost per household, duration of training, human resources). As Sector lead agency, it is crucial to **reach consensus on the resource allocation strategy in coordination fora** (such as technical working groups and strategic advisory group), in order to lead a Sector-wide joint response. Discussing implementation challenges – such as logistics and procurement – within the Sector benefits the development of a realistic and effective strategy.
- **Utilizing skills and expertise of affected people.** Communities were found to have not only unskilled workers, but also skilled individuals in carpentry and other techniques. Although this project took a people-driven approach (complemented with technical assistance), **Rohingya carpenters could have been more involved** even in the planning process, i.e. the development of the IEC materials and the training curriculum.