CASE STUDY

NIGERIA 2021–2022 / CONFLICT

KEYWORDS: Cooridnation and partnerships, Livelihoods, Recovery, Transitional shelter

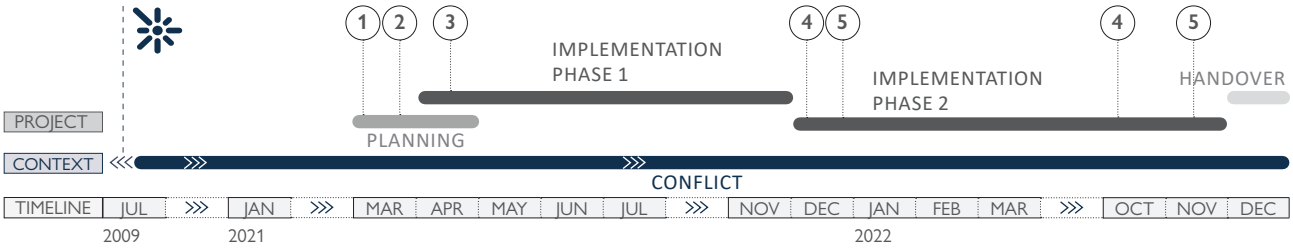
CRISIS	**Boko Haram Crisis, Northeast Nigeria**
PEOPLE DISPLACED	**2,197,824 individuals** displaced June 2022*
PEOPLE WITH SHELTER NEEDS	**2.95 million people** (589,169 HHs)*
PROJECT LOCATION	Yola, Mubi, Gwoza, Pulka (Borno and Adamawa)
PEOPLE SUPPORTED BY THE PROJECT	**1,500 individuals** (3,000 HHs)
PROJECT OUTPUTS	**340 durable mud shelters** (165 Yola, 25 Mubi, 75 Gwoza, 75 Pulka) | **300 NFI kits** distributed | **60 sanitation facilities** constructed | **60** local labor construction **trainings** | **60** local labour **Cash-for-Work program**
SHELTER SIZE	**Type A: 21 m²** (3.4m x 6.4m) **Type B: 18 m²** (3m x 6m)
SHELTER DENSITY	**3.6 m²** per person
DIRECT COST	**USD 700**
PROJECT COST	**USD 1,000**

*IOM Nigeria Displacement Report, Round 41, Baseline Assessment in Northeast Nigeria

**Humanitarian Response Plan, Nigeria, 2022 (February 2022)

PROJECT SUMMARY

Durable solutions have been provided through mud shelters modalities which is a pilot idea in the Northeast Nigerian context, welcomed by displaced persons, host communities and the government, especially as it aligns with the government long term policy on displaced persons. The project aimed to provide settlement planning and durable mud shelter solutions as an alternative to emergency shelter options. The mud shelters were designed through consultations with the community through prototyping and discussions, and were based on local shelter typologies and construction methods, which were improved upon previous models built by other shelter partners in the region. One of the main objectives was to provide livelihood opportunities by employing members of local communities through cash-for-work programs.



2009: Boko Haram uprising began in 2009, now in its 14th year.

1. **Mar 2021:** Trainings of local technicians.
2. **Mar 2021:** HLP arrangement with landowners.
3. **Apr 2021:** Pilot FGDs with women.
4. **Dec 2021, Oct 2022:** Construction of the mud shelters.
5. **Dec 2021, Nov 2022:** Distribution of NFI items.

The project supported the construction of 320 mud shelters across four locations in Northeast Nigeria.

CONTEXT

Nigeria is a country located in West Africa with a population of over 200 million people. The weather and climate in the country vary depending on location, but generally, the country has a tropical climate with two distinct seasons: the wet season and the dry season. The northeast region experiences a hot and dry climate, with temperatures reaching up to 40°C during the day. Nigeria is also home to a diverse range of ethnic groups, with over 250 different languages spoken throughout the country. Most of the population is either Muslim or Christian, with a small minority practicing other traditional religions.

The northeast region of the country has been affected by a long-standing conflict, primarily due to insurgency by the Boko Haram armed group, which began in 2009. The conflict led to the displacement of millions of people and has had since a significant impact on the socio-economic development of the region. Given this context, in 2021 there was a significant need for shelter solutions for displaced households.

SITUATION BEFORE THE CRISIS

Like in most cases in Nigeria, the target population lived in communal settlements primarily made of mud shelters and a small number of concrete buildings in rural communities. Families usually live in private spaces sometimes enclosed by light fencing made either of mud walls or grass mats, sometimes with no fencing at all. For individuals that had the space and financial ability, more than one building was built to better accommodate their large families. Roads were wide and undeveloped with no clear provision for drainage, causing considerable access challenges during the rainy season. There was a limited electricity supply, making households rely on kerosine lamps, flashlights, and on firewood for cooking fuel. For utilities, small cooking spaces were primarily separate from the main homes and in some cases fitted into a small attachment to the house. WASH utilities were also placed separately as a standard cultural practice for better hygiene.

SITUATION DURING/AFTER THE CRISIS

Due to the conflict and violence, individuals were forced to flee, leaving their homes behind in damaged conditions and having to seek emergency/temporary shelter provisions often provided by humanitarian actors or by the government. As the conflict became protracted, shelters were often used beyond their expected lifespan – causing a need for periodic repair or replacement and putting the affected population in recurrent vulnerable conditions. While having to deal with privacy, protection, and eviction issues, people often had to seek accommodation in host communities or planned/spontaneous settlements, depending on the presence of humanitarian or government actors in the location.

Displaced communities had to supplement aid provisions with local materials (often grass mats) to address their shelter needs as the assistance was limited and not always adequate. Unfortunately, sourcing those materials sometimes forced them to access unsafe territories, and have to be again exposed to non-state actors such as Boko Haram. The potentially fatal consequences highlighted the need to provide adequate and durable shelter solutions in safe locations.

NATIONAL SHELTER STRATEGY

The National Shelter Strategy/Response was developed in coordination with various Clusters and sectors, and aimed to address the shelter needs of displaced persons across the country, through different shelter solutions, including durable solutions, to displaced persons.

The plan included the provision of land for resettlement, the construction of affordable and sustainable housing, and the promotion of livelihood opportunities. The overall shelter response was coordinated within the SNFI cluster, together with other sectors to address the different components of the shelter response, including planning, construction, and delivery.

A view of the site with the mud shelters. 340 shelters with two different sizes of 18 m² and 21 m² were constructed.

PROJECT DESIGN/STRATEGY

The main goal of the project was to provide a durable mud shelter solution in a planned settlement as an alternative to recurrent emergency shelter options for displaced households in the northeast region of Nigeria. The project was designed based on local shelter typologies and construction methods and aimed to continue building upon the experience of previous models built by other shelter partners in the region. The project also aimed to provide increased security of tenure through long-term land-use agreements to targeted households who had informally resided in makeshift shelters on private lands.

The construction activities were implemented using a cash-for-work methodology to provide livelihood opportunities to members of local communities through the production of mud bricks and constructing shelters, as the intended outcomes of the project were to provide durable solutions to displaced persons and improve their living conditions while supporting their long-term resettlement.

The intervention filled critical gaps in the ongoing response by not only alleviating the suffering of the affected population but also by enhancing participants' dignity and protection from various vulnerabilities that arose from the lack of privacy due to a lack of shelter during the period of displacement.

In addition, capacity building to the affected population on construction methodologies and habitability conditions prior to and during implementation was aimed to strengthen the knowledge and skills of the affected people to maintain alternative options for their recovery.

The use of mud for the construction of the shelter walls was also motivated by the aim to mitigate the environmental impact of the project, as temporary emergency solutions required a high demand for wood and the use of other manufactured materials would have required procurement and transportation, with a negative impact to the environment through the different processes for the production and the sea shipments.

The project ensured that women were actively involved in the decision-making process and were provided with equal opportunities for employment and participation in the project activities.

Around 60 construction trainings were provided for capacity building.

IMPLEMENTATION

The project was implemented through a community-based approach, which involved community members in the design of the project, and further engaged the community through:

- Consultations with IDPs to help ensure that the shelter design was culturally appropriate and relevant to the household needs.
- Capacity-building activities provided to local communities on shelter construction methods and good maintenance practices, as well as awareness sessions on fire safety, environmental sanitation, and flood mitigation.
- The construction of a prototype shelter for the confirmation of the design through focus group discussions.
- The training of local workers, including IDPs and members of the nearby host community who were also employed in the project through the local contractor commissioned with the production of the mud bricks.

TARGETING

Project areas were selected through detailed site profiling which included the location and conditions of existing makeshift shelters and household demographic structures. The households targeted by the project were those who resided in informal makeshift shelters on private lands and were assessed as the most vulnerable. The project provided two or more shelters to families with five or more members.

DISASTER RISK REDUCTION

The project had Disaster Risk Reduction (DRR) components aimed at addressing hazards and threats faced by the affected population. The mud shelter solutions provided were designed to be resilient to the harsh climatic conditions in the northeast region of Nigeria. The project also included training for the community on DRR measures such as environmental planning, flood mitigation measures, and fire safety.

MAIN CHALLENGES

The project faced significant challenges related to seasonality, market conditions, and currency fluctuations, which were addressed through various measures such as reducing delivery time, increasing communication with local authorities and communities, and adjusting the project budget and timeline to account for the challenges.

While mud shelters face challenges such as off-season mud brick sourcing, the comparison with the cost of other short-term solutions, and the difficulties of carrying out the construction during the rainy season, they prove to be viable long-term solutions if done with adequate planning and management of the implementation process. However, the provision of mud shelters was limited by issues related to the availability of land with secure tenure agreements, especially in garrisoned areas where land is scarce due to increased shelter needs caused by new arrivals and the demands of private landowners. Addressing these challenges required ongoing collaboration with the Information, Counselling, and Legal Assistance (ICLA) team within the organization, relevant sector working groups, and the government.

CROSSCUTTING ISSUES

The project considered and addressed crosscutting issues such as security of tenure and environmental impact. One key issue was gender, and the project ensured that women were actively involved in the decision-making process and were provided with equal opportunities for employment and participation in the project activities.

LINKS WITH RECOVERY

The mud shelter project in northeast Nigeria aimed to link relief and recovery phases by providing durable shelter solutions that could integrate support to displaced households in the short-term through the livelihoods opportunities generated within the construction activities, in the long-term with the land use agreement that ensured the security of tenure, and throughout the phases with the provision itself of a long-lasting shelter.

Moreover, capacity-building activities were provided to the affected population on construction methodologies and habitability measures before and during the implementation, which enhanced participant knowledge and skills in maintaining alternative options for their recovery.

The project also had wider impacts, such as aligning with the government's long-term policy on displaced persons and providing a model for scaling up a response to support durable solutions for the IDOs. Unexpected or unintended consequences were not documented.

Distribution of NFI items were carried out in two phases – in the month of December 2021, and November 2022. 300 NFI kits were distributed.

Focus Group Discussions with the women in the community, April 2021.

Coordination with the WASH sector for provision of latrine facility.

The community wes included in the design phase of the mud shelters, ensuring engagement througout the project cycle.

STRENGTHS, WEAKNESSES AND LESSONS LEARNED

STRENGTHS

√ **The development of a shelter design based on local typologies** and construction methods, and building upon the experience of previous models built by other shelter partners in the region.

√ **The project maximized the use of land space by conducting detailed site profiling** to map the location and conditions of existing makeshift shelters and designing Shelter Clusters based on the size of households and the location of makeshift shelters. Families with five members were given two or more shelters, which provided them with exclusive and demarcated footprints for external space.

√ **The mud shelters provided longer lasting and more durable solutions in comparison to temporary shelter construction.** This was a significant improvement, especially for displaced households who had informally resided in makeshift shelters on private lands without long-term security of tenure.

√ **The mud shelters provided improved privacy and protection from weather elements**, which helped to address critical gaps in the ongoing response. This not only saved lives and alleviated the suffering of the affected population but also promoted their dignity and protection from various vulnerabilities that may arise due to lack of privacy resulting from inadequate shelter.

√ **The project provided livelihood opportunities** by employing members of local communities through CfW programs for making mud bricks and constructing the shelters, contributing to wider impacts.

WEAKNESSES

× **The project faced significant construction challenges during the rainy season,** which impacted delivery time and increased pressure on the project team and artisans.

× **The cost of constructing durable mud shelters was higher** compared to temporary shelter options, which posed a challenge in budget management.

× **Negotiating access to private land for shelter construction** was a significant challenge that required more time and resources than anticipated.

× **Sourcing mud bricks during the rainy season presented an additional challenge** that could have been mitigated through better planning and preparation.

LESSONS LEARNED

- Optimal construction can be achieved during dry seasons.
- Temporary tarpaulin covers can help mitigate rain-related setbacks during construction.
- The use of 9-inch mud blocks instead of 6 inch blocks improves structural stability.
- The internal use of 3 by 3 inch timber posts can anchor roof systems to the ground and prevent damage from strong winds.
- Increased use of bitumen and engine oil in mud plaster sand can enhance durability and reduce leaching.

RECOMMENDATIONS MOVING FORWARD

- Construction during the dry season helps to ensure top-quality delivery while reducing the risk of potential losses in project delivery time and construction materials – a constant challenge during monsoons. Construction in the dry season also removes the additional cost of protective covers. The covers are not absolute protection against driving rain, but only mitigate the impact to a small degree. The associated monitoring of the use of these covers by artisans are an additional challenge best avoided by constructing in the dry season.
- Construction during this season also helps to avoid the bending of mud walls at later stages of construction. This challenge is notable during the rainy season, as mud walls are constructed in three levels, with break intervals to allow the walls set properly. Strong winds and rains during such intervals affect the setting time of the walls causing a bend. Consequently, the walls will either need corrective work or reconstruction, which will impact all project parameters negatively.
- For project planning, the delivery time and the work plans must be developed in a way as to allow for construction before and/or after the rainy season period which spans about five to six months in the northeastern Nigerian context. It is also the peak period to produce mud bricks, taking advantage of abundant sunlight for proper curing.

FURTHER READING ON SHELTER PROJECTS

On transitional shelters: A.24 / SRI LANKA 2017; A.10 / JORDAN 2013; A.13 / INDONESIA 2018–2020

On recovery: A.19 / NEPAL 2017–2018; A.4 / NIGERIA 2017–2018; A.3 / KENYA 2018

A locally-made fence around the mud shelters, which ensures privacy and protection.

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