

SHELTER IN LÓVUA SETTLEMENT



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[Click here to watch a short YouTube documentary on shelter in Lóvua.](#)

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What is shelter?

A makeshift of temporary dwelling used in or after an emergency

Shelter in refugee settings

By losing a home during conflict, people of concern lose their security and assets as well as dignity and privacy. Shelter is a critical element in the early stages of any emergency along with water, sanitation, food and health. Indeed, exposure to the elements, over-crowding, an unfamiliar environment and lack of privacy can cause traumatic experiences.

Refugee shelters range from temporary emergency tents to permanent homes. Shelter activities in refugee settings can have several positive effects such as improving physical and mental health through the restoration or development of shelters for refugees. The construction of housing also creates temporary employment, which is crucial during an emergency as the money earned can be used to develop livelihood activities. Shelter is not limited to homes, but does also include public infrastructure such as clinics, schools and distribution centres. In an emergency scenario, there is also typically a reception centre, which is a temporary shelter (or group of shelters) that provide short-term support to people of concern while they are being registered and referred to alternative housing solutions.

The UN Refugee Agency (UNHCR) considers several aspects when implementing shelter assistance during an emergency.

In an ideal situation, the shelter response should consider the context in which the refugees are sheltered, for instance, shelter solutions should be designed based on context-specific structural and performance requirements. (construction materials questions). Moreover, such solutions should enhance local integration and benefit the local economy. The strategy should also allow for the provision of emergency shelter initially and more durable solutions over time. Lastly, the implementation should be inclusive, involving host communities and refugees from an early stage.

It is important to note that shelter assistance is not limited to pre-determined shelter products. There are usually provisions of basic shelter materials for construction, technical support that is provided to people of concern, cash-based assistance, awareness-raising activities as well as rental support or a combination of these approaches. Shelter materials can include a shelter kit with a length of rope, woven and laminated plastic sheeting, and at least 2 high-specification tarpaulins as well as some tools and fixings. Moreover, to facilitate the building of a home for the person of concern, household Non-Food Items (NFIs) are also provided. Household NFIs usually include bedding, blankets, clothes, kitchen sets and stoves.



SHELTER CLUSTER

In 2005, the [Global Shelter Cluster](#) (GSC) was created to improve the coordination of shelter interventions in emergency situations. It is an Inter-Agency Standing Committee (IASC) coordination mechanism, meaning that it is a primary tool for inter-agency coordination of humanitarian assistance involving important humanitarian organisations. The GSC is co-led by UNHCR and the International Federation of the Red Cross and Red Crescent Societies (IFRC). While the IFRC leads in natural disaster situations, UNHCR leads the team in conflict-generated displacement.



Shelter Cluster



Figure 2: UNHCR and NCA lead the shelter response in Lóvuva settlement ©UNHCR/Omotola Akindipe

Figure 3: An opened RHU box ©UNHCR/Omotola Akindipe

GLOBAL SHELTER COALITION

The [Global Shelter Coalition](#) was launched in 2016 and this coalition brings together leading companies, foundations and private philanthropists to provide safe and sustainable shelter solutions to refugees. Through the Global Shelter Coalition, more than 1.3 million refugees have received shelters such as Refugee Housing Units (RHUs), shelter kits, cash assistance and land plots in Niger and Uganda amongst others.





Shelter in Lóvua settlement

Shelter forms part of the technical response in Lóvua settlement and a [shelter strategy](#) was developed last year to facilitate the refugee response in terms of the promotion of social cohesion and provision of a secure and health living environment amongst others. Last year, the shelter programme was implemented by World Vision (WVI) and this included achievements such as the construction of 3 permanent schools. In 2019, the partner for shelter is Norwegian Church Aid (NCA) and one of the main interventions this year has been the implementation of Refugee Housing Units (RHUs).

To assist refugees in the construction and technical assistance of shelter products, NCA established various groups such as 9 groups of carpenters, 5 groups

of Rhu markers (each group has 5 people) as well as 200 casual workers.

Providing technical assistance is important, especially as this involves the training of refugees and often leads to employment. Moreover, trained individuals can pass on their knowledge and assist people with specific needs. In Lovua assistance is provided for block construction, foundation construction, wall construction and roof construction.

In Lunda Norte, the weather is very warm and there is an 8-month period for the rainy season. Additionally, during the rainy season, there are instances of heavy rain. This means that there are cases of shelters, mainly, tents that have been damaged or blown off. Usually when this happens, they are replaced with tents as soon as possible and in some cases, plastic sheets are provided.

Figure 4: A refugee stands in front of his home in Lóvua settlement ©UNHCR/Omotola Akindipe



Emergency Family Tents



Homes with Timber Poles

The 4 main shelter interventions in Lóvua settlement, Angola

Homes with compressed earth stabilized blocks



Refugee Housing Units (RHUs)





Figure 5: A refugee making a compressed stabilized earth block © UNHCR/Omotola Akindipe

In the immediate aftermath of an emergency, tents are usually the lightest, cheapest and fastest product that UNHCR offers to create physical privacy and protection from the elements. They can be set up within an hour and are designed as a short-term shelter solution. Tents usually have a life span of 6 months allowing time for the development of semi or permanent shelter.

The UNHCR family tent has a 16m² main floor area, plus two 3.5 vestibules, resulting in a total area of 23m². It is suitable for a family size of 5, as it follows the recommended international sphere minimum living area of 3.5m² per person.

Emergency tents

Figure 6: An emergency family tent in Lóvua settlement ©UNHCR/Omotola Akindipe



Homes with timber poles

In Lóvua, homes with timber poles are usually the first semi-permanent solution that is an upgrade from emergency tents. Locally, these homes are popular and called ‘pau a pique’, meaning that refugees in Lóvua settlement naturally build their homes based on the typology of the local region. Timber pole homes are popular with the local and refugee communities in Lóvua as they are relatively quick to construct and do not require technical expertise.

To develop such a house, timber poles are used to make a grid and then they mix soil with water to make mud, which is then put inside the grid of the timer poles. In Lóvua settlement, UNHCR and partners support refugees with plastic sheets that become the roof of the timber pole home.

At the end of 2018, 2,614 homes in Lóvua settlement were constructed with timber poles. However, UNHCR and partners are currently discouraging the construction of homes with timber poles as this has had a negative impact on the environment. The huge population of more than 20,000 people in Lóvua has led the cutting of many trees, therefore homes with compressed stabilised earth blocks are supported and recommended.



Figure 7: The side of a timber pole home in Lóvua settlement ©UNHCR/Omotola Akindipe

Figure 8: A completed timber pole home in Lóvua settlement ©UNHCR/Omotola Akindipe

Figure 9: A timber grid house without the mud in Lóvua settlement ©UNHCR/Omotola Akindipe



Figure 10: a homes with compressed stabilized earth blocks in Lóvua settlement ©UNHCR/Omotola Akindipe

Homes with compressed stabilized earth blocks

Homes with compressed stabilised earth blocks (earth block homes) are becoming popular in the settlement. The key component is the block, which is not cooked (hence why it is not called a brick). They are made using a block-making machine, the local soil and a 5% mixture of cement to stabilize the block. The objective is to be as sustainable as possible.

UNHCR and NCA provide each village with 2 block-making machines and each machine can produce 300 blocks a day. The blocks usually take 2 days to dry and roughly 5,000 blocks are needed for the construction of a house.

Making blocks is more effective during the dry season, but this is short in Lunda Norte. The rainy season lasts for approximately 9 months and this leaves a limited time to make blocks and dry them properly. However, in contrast, during the dry season, a major challenge having adequate water for block making, especially for the households which live far from water sources.

Refugees who build earth block homes receive

more support than those who build timber pole homes, this is partially due to the drive to decrease timber pole homes. Refugees receive 20 iron roofing sheets, 12 timber planks and 3kg of nails as well as technical assistance by NCA's teams. For instance, in many cases NCA will send a technical team to build the foundation and set up the roofing for refugees. Teams will usually start with the foundation and then install the timber planks as the skeleton of the house before adding the roof. Although refugees can design their homes, it is important that the dimensions of the earth block homes respect the international sphere standard of 3.5m² per person in terms of space.

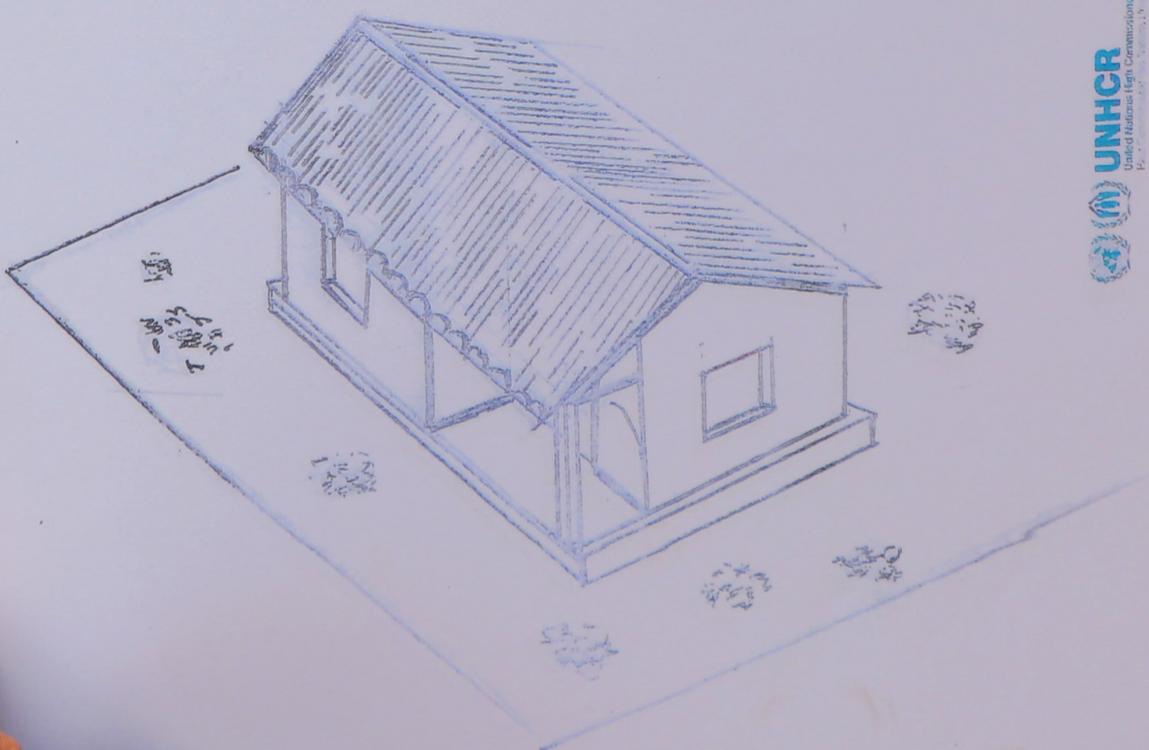
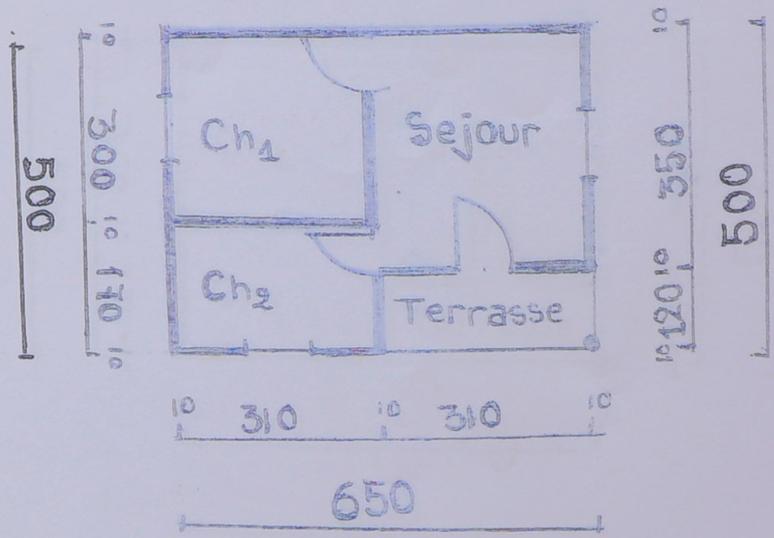
Due to the rainy season, that will start in August and last until May 2020, UNHCR and NCA have decided to prioritise the construction of the roof. As such, in case the home is not completed before the start of the rainy season, refugees will still have some shelter to protect them.

In 2019, some 385 homes have so far been constructed with earth blocks.



Vue en plan type & Perspective

Casa b Lovua



 NORWEGIAN CHURCH AID
actiance

 **UNHCR**
United Nations High Commissioner for Refugees

Figure 11: Blueprints for a home with earth blocks © UNHCR/Omotola Akindipe



Refugee Housing Units

The Refugee Housing Unit (RHU) is a self-standing and durable shelter, designed through a collaboration between UNHCR, the social enterprise Better Shelter and the IKEA Foundation. The RHUs, which are 15m², have panels to make up bedrooms, a kitchen area, a lockable door and a LED lamp which provides more than six hours of light. They are durable, with a lifespan of approximately 5 years.



A team from UNHCR's headquarters sent 850 RHUs to assist refugees in Lóvua settlement and in March 2019 a member of the shelter team also visited Lóvua to train humanitarian and refugees on the assembling and maintenance of the refugee house unit. After this training, UNHCR and NCA set up 5 groups of RHU specialists with 5 specialists in each group making a total of 25 specialists in the settlement.

The priority has been to build RHUs for vulnerable families that have been identified by UNHCR's protection unit.

As of 7 July 2019, 135 RHUs have been built for refugees' families and 26 RHUs have been used to build public infrastructure such as the newly renovated first clinic.



Figure 12: The inside of the door of an RHU with fire safety instructions ©UNHCR/Omotola Akindipe

Figure 13: A completed RHU in Lóvua settlement ©UNHCR/Omotola Akindipe

Figure 14: An NCA mobiliser builds an RHU ©UNHCR/Omotola Akindipe

RHU Features

- A steel metal frame covered with opaque plastic and semi-hard roof and walls
- A lockable door from the inside and the outside
- 15 m² floor space and high ceiling create a spacious interior that allows users to stand upright and provides enough space for equipment and personal belongings
- An interior dividing wall creates two rooms, helping to separate living and sleeping quarters.

Interview with Michelo Miyoba

Michelo Miyoba is UNHCR's Associate Physical Site Planner in Dundo, Angola. He is responsible for the shelter, environment and WASH response in Lóvuva settlement

1. You are an architect by trade, how has that helped you with your work in shelter for UNHCR?

As an architect, my work basically involves the design and construction of residential and public infrastructure. This has helped me to have a detailed understanding of the requirements of the shelters for refugees. I have also gained experience on refugee shelter through working with UNHCR for 3 years now.

2. How important is innovation in shelter interventions?

Innovation is important in order to improve the comfortability of the people living in shelters. The designs and construction of shelters should be suitable for the climate conditions, available construction materials etc. As a result, innovation is important to make sure that all these conditions are taken into consideration when building the shelters.

3. When designing shelter, such as the clinic in Lóvuva settlement, what do you normally take into consideration?

When designing clinics, we consider what services (consulting rooms, maternity dressing rooms, pharmacy, psychosocial counselling etc) will be provided. This determines the layout of the clinic. We then also look at the average number of patients expected daily to determine the size. Other issues to be looked at include the need for proper ventilation, privacy of consulting rooms, proper lighting etc.

4. Based on your experience with refugees in an African context, what style of architecture do you think works best if such a style exists?

I think the timber poles and mud houses with thatched roof seems to be much easier to build despite it having a huge impact on the environment. This type of house is very common in most parts of Africa and is common with many host communities. The sun-dried block walls are also suitable for the African context as they are cost effective and have less impact on the environment.



Figure 15: Michelo Miyoba in Lóvuva settlement © UNHCR/Omotola Akindipe

Challenges and future of shelter in Lóvua settlement

There are several challenges facing the shelter response in Lóvua settlement. The major challenge is the lack of adequate funding to support all the households in the settlement, especially due to the main popular interventions (earth block homes and RHUs). Another challenge has been the unwillingness of some families to build despite the recognition of potential weather hazards due to the possible start of the repatriation of the refugees to their country of origin. In May, UNHCR and partners organised an intention survey in which 85% of refugees in Lóvua settlement stated that they want to return to the DRC.

Moreover, sourcing construction materials in Dundo is difficult and this means much the materials must be purchased in and brought from Luanda. Naturally, this has a cost and time implication that has affected the shelter response.

In the future, the shelter unit plans to ensure that all households move from emergency tents to transitional shelter. This year, some 2,000 households from close to 6,000 will be assisted with roofing sheets, cement, timber planks and nails. Moreover, there are plans to move all households who live in timber pole homes to earth block homes in order for all families to receive the same amount of support.



Figure 16: A meeting between UNHCR and partners and the refugee community on shelter matters in Lóvua settlement ©UNHCR/Omotola Akindipe



Figure 17: A Lóvuá village in Lóvuá settlement ©UNHCR/Omotola Akindipe

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