

Through its Key Initiatives series, UNHCR's Division of Programme Support and Management (DPSM) shares regular updates on interesting projects that produce key tools, practical guidance and new approaches aimed to move UNHCR operations forward.



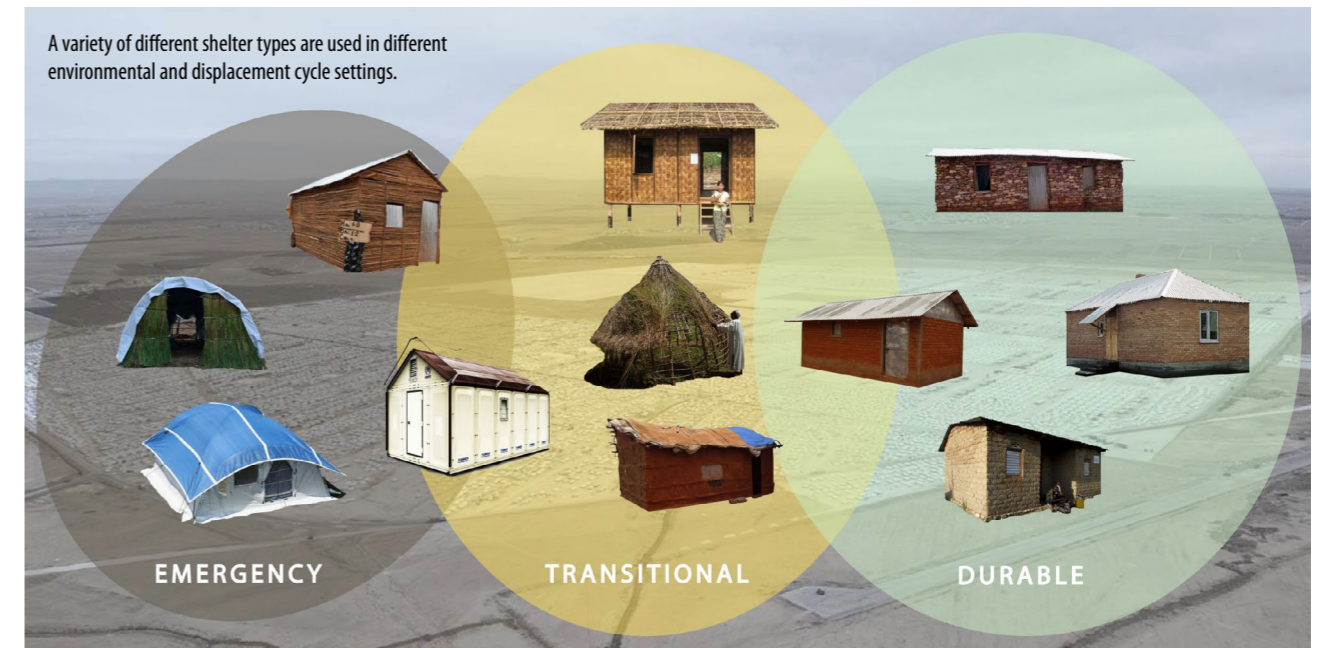
As the sun sets on Nyumanzi I settlement, many refugees are still hard at work constructing shelters. In many situations, tents, plastic sheeting and local materials available continue to be the standard. UNHCR / F. NOY / January 2014

### MEETING SHELTER NEEDS WITH EFFICIENCY

Shelter should be more than just a roof over the head to provide adequate protection for displaced persons. The Sphere Project, which established international standards for humanitarian action, states that all crisis affected people should have a minimum covered living area of between 3.5 – 4.5m<sup>2</sup> per person, depending on the climate. The shelter solutions and materials should also meet the agreed technical and performance standards, be based on participatory design, ensure privacy and be culturally acceptable. UNHCR strives to ensure that shelter options are developed utilizing, where possible, the skills within

the affected population and promote the use of local construction materials.

Tents remain the standard emergency shelter response in camp settings. Durable shelter options with longer-term life cycles are considered to be more suitable for protracted displacement situations than tents, considering their cost and limited lifespan. However, tents can be delivered rapidly to provide lifesaving assistance, making them crucial at the very onset of an emergency. Plastic sheeting can also be used to provide emergency shelter. In 2013 and 2014, UNHCR distributed more than 182,460 tents and 40 million m<sup>2</sup> of plastic sheeting worldwide.



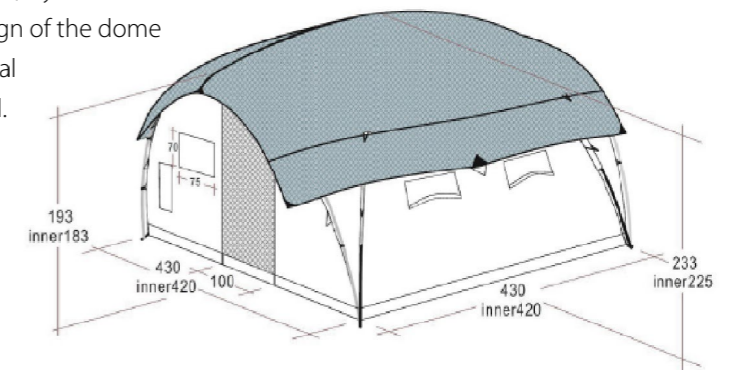
# Innovative Shelter Solutions through Research and Development

**UNHCR is developing a new model of self-standing family tent and the Refugee Housing Unit (RHU) for field operations. These innovative shelter options with improved materials and design align with the Global Strategy on Settlement and Shelter 2014-2018 and provide refugees and other people of concern with more privacy, security, protection from the elements and a sense of home in the face of emergencies.**

The vision of the *Global Strategy* is that all refugees are able to satisfy their settlement and shelter needs in a safe, dignified and sustainable manner wherever they may be. Recognizing shelter as an imperative priority for displaced populations who have been forced to flee their homes, UNHCR fosters innovative research and development to promote different and adapted types of shelter and improve the quality and performance of shelter and settlement solutions.

### THE NEW SELF-STANDING FAMILY TENT

The new self-standing family tent was designed by technical experts from DPSM's Shelter and Settlement Section, together with the International Federation of the Red Cross and Red Crescent Societies (IFRC) and the International Committee of the Red Cross (ICRC). Development of the tent involved the field-testing of three different tent designs (Dome Tents, Hexagonal Tents and Umbrella Square Tents) by the three agencies. The new tent is based upon an improved design of the dome type tent and provides enhanced protection, thermal comfort, greater privacy and uses lighter weight material.



Prototype of the self-standing family tent.



The new self-standing family tent includes a winterization kit, which can be used to ensure the tent's thermal comfort in extreme conditions and to provide better protection against cold weather.

## TESTING TO MOVE FORWARD

Field-testing in Burkina Faso and Pakistan will assess the tent's performance in both hot and cold weather, and allow the agencies to study the prototype with regard to ventilation, insulation, resilience to extreme weather, space, as well as cultural suitability and overall safety. Refugees are closely involved in the testing process and have provided positive feedback, especially on such key features as additional living space and a built-in partition for separate living and sleeping quarters. Testing, quality control and visual inspection of products remain at the forefront of UNHCR's response.

## THE REFUGEE HOUSING UNIT

The Refugee Housing Unit (RHU) is an innovative shelter solution, designed as a result of a research and development project undertaken by the Refugee Housing Unit AB, Sweden, (now called Better Shelter SA) and UNHCR, with the support of the IKEA Foundation. The RHU provides an improved standard of living, comfort and safety that can be particularly appropriate in protracted displacement situations when local materials are not available. The RHU has an expected lifespan of 3 years with limited maintenance. RHUs can also be connected together and create bigger

structures, giving them the ability to serve a variety of shelter and settlement needs.

UNHCR tested and evaluated prototypes of the RHU in Ethiopia and Iraq. The evaluation considered the personal, social and cultural expectations of the refugees and others of concern, the local and environmental conditions of the shelter, and the production and deployment features to deliver a more dignified and viable end-experience to its users. Additional winter and hot climate kits will be developed to make the RHU more suitable for different climates. The RHU was introduced to operations in May 2015 and has been deployed to Djibouti, the former Yugoslav Republic of Macedonia, Greece and Iraq, with use foreseen in Serbia, Chad and several other countries.



The Refugee Housing Unit.

## WHAT COMES NEXT?

- In 2015, a total of 20 units of the prototype self-standing family tent are undergoing field-testing in Burkina Faso and Pakistan. The final validation of the technical specifications will be completed by the first quarter of 2016.
- In 2015, UNHCR's Shelter and Settlement Section will launch the *Shelter Design Catalogue*, presenting in an organized manner different shelter solutions and relevant technical information and guidance on use in diverse locations and contexts to meet emergency and transitional shelter needs.
- Both the self-standing family tent and the RHU will be included in the updated *Core Relief Items Catalogue*, making them available for deployment to any given operation.
- In 2015, UNHCR's Shelter and Settlement Section will launch a new e-learning programme on shelter and settlement solutions as part of the implementation of the *Global Strategy*.
- UNHCR's Shelter and Settlement Section will continue research and development efforts on alternative shelter options to better respond to the needs of refugees and other people of concern.

## MORE INFORMATION

The UNHCR *Global Strategy on Settlement and Shelter 2014-2018* is available here: <http://www.unhcr.org/shelterstrategy>

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