

Title of Project: Building a Sustainable Future
Country: Uganda (Rhino Camp Refugee Settlement)
Sponsoring College: Wellesley College
Student Leaders: Laila Pearson (USA, Wellesley College), Anushe Sheikh (Pakistan & USA, Wellesley College), Nisrine Benhaddad (France, Sciences Po Paris)

Context

The Rhino Camp Refugee Settlement in Arua District is Uganda's 4th largest refugee camp with over 100,000 South Sudanese refugees. Despite overall good relations between local Ugandan host communities and refugee communities, inter-and intra- community tensions exist and, on occasion, have become serious. While working on a previous project with the MIT D-Lab Humanitarian Innovation Team, we spoke to members of the South -Sudanese refugee community living in Rhino Camp about what issues they faced. The conflict they highlighted the most was the competition over natural resources, particularly grass for thatched roofing and poles for construction and shelter. We heard several accounts of collapsing roofs and flooding during the rainy season, as well as overheating during the hotter months due to poor infrastructure. Humanitarian agencies do not provide roofing material, and as a result, refugees- especially women- must negotiate with the host community daily to access resources outside of the refugee settlement area.¹ Host communities, in turn, are worried about environmental degradation because of refugee presence, but efforts to prohibit the cutting down of trees are not always respected due to the high cost and limited availability of other materials for refugees. The competition over natural resources has resulted in tensions and if not addressed properly, can escalate.

Last year, we worked with our community partners– the refugee-led, Rhino-Camp-based NGO Youth Social Advocacy Team (YSAT) and the Ugandan NGO Kulika Uganda–to research, generate and present alternate construction solutions to break down barriers and tensions between refugee and host communities. The solution chosen by our partners was the Nubian Vault (NV) technique. Originating in ancient Nubia, the adobe brick technique emphasizes using locally available resources, without the need for scarce resources like timber, grass, or poles. The NV technique is both ancestral and innovative, known for its many advantages, including its durability, ease of adoption and replication, and promotion of local economies and community relations.

The Project

Our project is focused on building a simple home using the NV technique, guided by two trained masons. We will continue cocreating with local stakeholders to design and carry out the construction. Our partners and participants will consist of both refugees and members of the host community, men and women, adults and youth. As sustainable construction is a new concept in Rhino Camp, there is some hesitation around how safe and reliable the technologies are. The process of training and building a simple Nubian Vault home will promote collaboration, mutual understanding, trust, and stronger communal bonds.

Goals

- Strengthen the capacity of refugee and host community members to promote peaceful co-existence and social cohesion

¹ Van Laer, Thijs. "Understanding Conflict Dynamics around Refugee Settlements in Northern Uganda." International Refugee Rights Initiative, August 2019.

- Develop local skills and validate whether the NV technique is culturally and contextually feasible long-term in Rhino camp as an alternative housing solution
- Ensure inclusive participation of diverse members of host communities and refugees alike in discussions about sustainable innovation and design as well as peace-building workshops

Local Partners

Augustin Tonavo is the Coordinator of the Africa Training Center at the **Association la Voûte Nubienne (AVN)**, a French non-profit that aims to enable access to decent, affordable, and sustainable housing in West Africa. He has agreed to be our primary contact and help with the project, namely in the recruitment of 2 expert masons and the dissemination of the Nubian Vault (NV) construction technique.

John Jal Dak is the founder of the South-Sudanese refugee-led, Rhino-camp-based organization **Youth Social Advocacy Team (YSAT)**. **Bidali John** is a project manager at YSAT. As leaders of this project, they will help facilitate relationships and act as consultants for any concerns that arise.

Amen Emmanuel is a Project Manager at **Kulika Uganda**, a local NGO based in Uganda that is establishing a local innovation center in Rhino Camp in partnership with MIT D-lab and YSAT. As a member of the host community Emmanuel has agreed to be our contact and a lead coordinator in design and implementation.

Implementation

Before the project's start date, we will continue collaborating virtually with community partners in the design and preparation of a series of community-wide discussions and workshops. We will leverage YSAT's experience and success in leading conflict transformation and peace-building initiatives for women and youth in Rhino Camp. In addition, we will offer technical opportunities for community members to learn about sustainable innovation and the NV technique (eg. adobe brick-making workshop). The first week will be used to meet the trainers and ensure that the necessary raw materials have been prepared and transported to the Kulika Innovation Center.

The construction portion of the project will be implemented with the full support of two of AVN's certified expert masons in the NV technique. They will work directly with 9-10 members of the local and host community in the construction of a simple NV home. Constructions of this size is estimated to take 25 days, providing us with the time to accommodate for different capabilities and any unexpected delays. Once the main structural works are completed, we will facilitate wider community interaction by inviting them to observe and ask questions to the expert masons and local members involved in construction. The event will serve as an opportunity to celebrate the various community organizations and leaders that were a part of the effort. We will also regularly meet with key stakeholders and community leaders to discuss any concerns and the long-term feasibility of the NV technique in Rhino Camp.

Sustainability

Due to the ongoing security risks in South Sudan, many refugees are unlikely to return. This pilot project serves as an introduction of AVN and the NV technique to local NGOs with the possibility of a long-term partnership to disseminate and adopt the technology more widely. While we hope that the exemplary construction itself serves the community for years to come, we aim for the more lasting impact to be the inter-and intra- community relationships built throughout this project. We hope the conversations, collaboration, and the process of learning and building the NV home together will create a foundation of mutual trust that will prevent future tensions and conflict to ensure the gradual integration of refugees and Ugandans in Northern Uganda.