Abstract

Southern Sudan has been facing political turmoil for decades. Going on the country’s third civil war, there have been about 1.6 million Southern Sudanese displaced. A majority of these people have fled into bordering country Uganda. In the northern part of the country there are many established refugee camps that are becoming more crowded every year. Due to this the camps are less safe and less structured. Our goal and main priority is to create a new camp for the influx of refugees that is more secure and comfortable than the present camps. In order to do this we needed to create cheap yet secure housing for the families that can be assembled fast and easy. In addition to the housing design we also created an overall design to the whole camp to improve security and camp morale. The design must be able to add additional housing if more refugees flee, this should relieve any overcrowding in this camp.

Individual Shelter Concept

- Each individual shelter is going to be made out of PVC pipes with custom joints in order to achieve the desired geometry.
- A PVC structure was chosen for its cost effectiveness, ease of access, and ease of assembly.
- In the top of each shelter, is a plexi-glass hexagon to allow sunlight into the home, without risking the safety and security of the shelter.
- Although in Uganda, it is uncommon for there to be any flooding or too much rainfall, the base of each shelter will be sealed with clay to prevent leaking.

Camp Concept

- Our design consists of an arrangement of tesselated communities, which would allow for further expansion to compensate for the rapidly growing amount of refugees
- A significant issue within existing camps is violence and theft, therefore we designed our honeycomb layout to influence a positive, tight knit community.
- In between each grouping of houses is a “community center” in which health, school, religious, and administrative services will be accessible.
- As we build the honeycomb of communities, will be room for farmland, as there still needs to be some source of income and food for many.