Group 2

Understanding the Needs, Requirements, and Definition of the Problem
Greenhouses: A greenhouse is necessary in Kenya because of how arid the country is. Kenya has about 13 inches of rain each year. The average temperature of 66-99 degrees Fahrenheit. The coastal regions are humid and wet; receiving 41 inches of rain per year, 70-90 in hot and dry seasons 68-85 in the cold seasons. In the Highlands, 31 inches of rain are received each year, 48-84 degrees in the hot season, 45-79 in the cold seasons. In areas near Lake Victoria in the high lands, the most water generally falls. 70-80 inches around mountainous terrain. There are periodic droughts that can destroy crops.

Gathering Information and Solution Concept Options:

- Plastics
- Trees
- Tarps
- Wooden Structure
- Wire frame

Solution Concept options Generation and Selection:

As a group we must decide on a greenhouse that excels in the given criteria. A greenhouse must block light and regulate the temperature of the inside.

Description of the Proposed Solution Shown in the DEM Showcase:

Our group decided on a greenhouse with an all-natural canopy system functioning as the cover for the roof. The sides are covered in tarps and the front tarp can be rolled up and down for access. The Makua trees function as the frame for the greenhouse as well as the “glazing.”