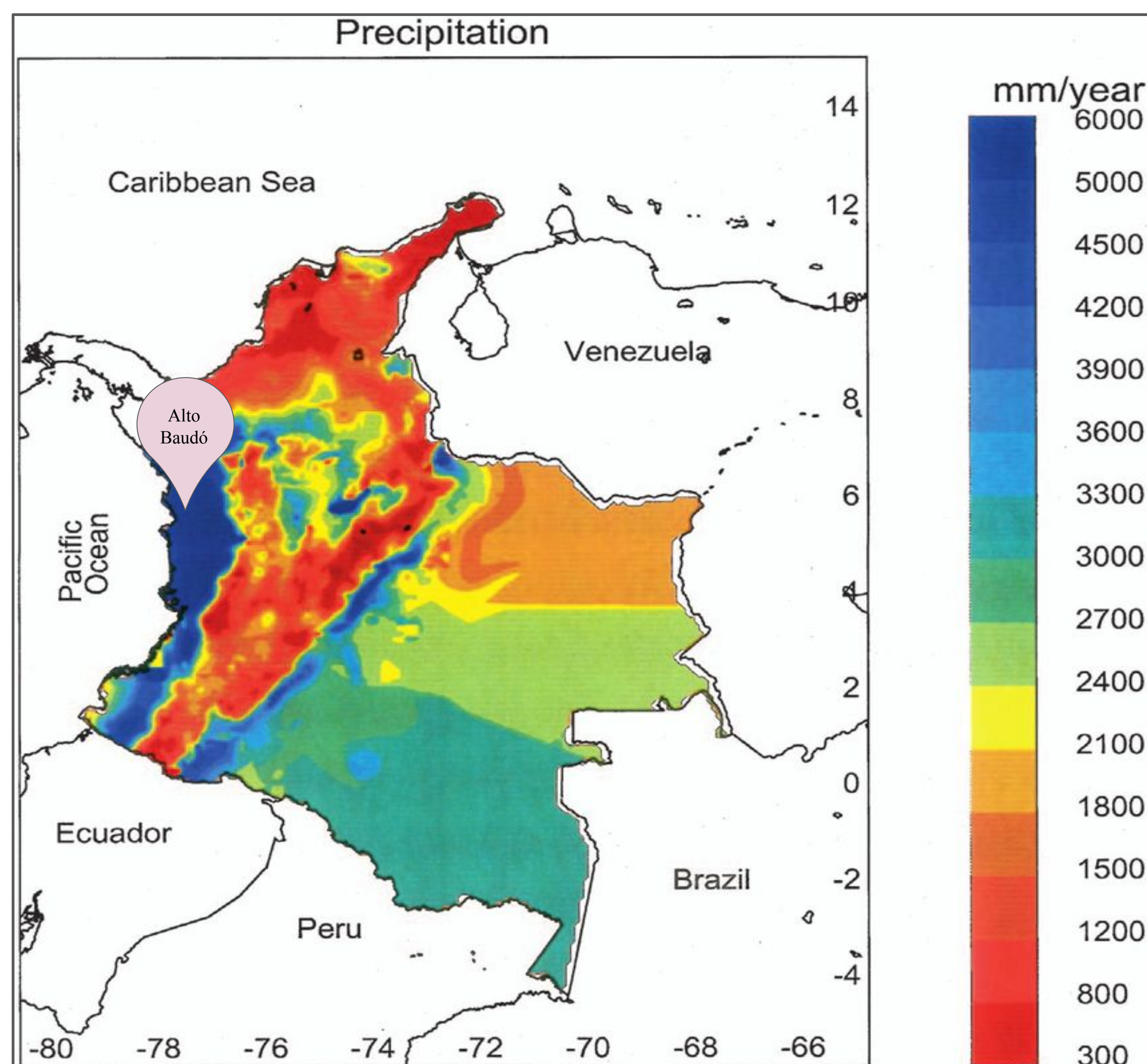


Permanent Housing In Rural Colombia

Project Members: Emily Howard, Marisa Lamprey, Alyssa Magaha, Adam Marsh

Advisors: Courtney Kurlanska, Soroush Farzin



Task	Time (12 weeks)	Cost
+Fund Raising	[Progress bar]	-\$5,000
+Participatory Design	[Progress bar]	
Discuss with gov't (FUNDS)	[Progress bar]	
+Construction	[Progress bar]	\$4,750
Import materials	[Progress bar]	\$3,000
Clear land (previous house)	[Progress bar]	\$750
Building	[Progress bar]	\$1,000
Drive Posts and Build foundation	[Progress bar]	
Melt plastic, mold bricks, lay brick	[Progress bar]	
Roof Construction and Implementation	[Progress bar]	
Furnish and add Water Filter	[Progress bar]	

Abstract

Throughout the world, the effects of climate change have drastically increased. In Alto Baudó, Colombia, flooding has grown increasingly worse over the past decade.

The goal of this project is to develop a home that can sustain these weather patterns while also providing construction jobs, implementing water storage and a filtration system to provide in-home access to clean drinking water.

Background

The current housing structures in the village of Alto Baudó are extremely vulnerable to increased flooding.

Houses are often made of wooden planks or bricks, which is not a stable material for flooding conditions.

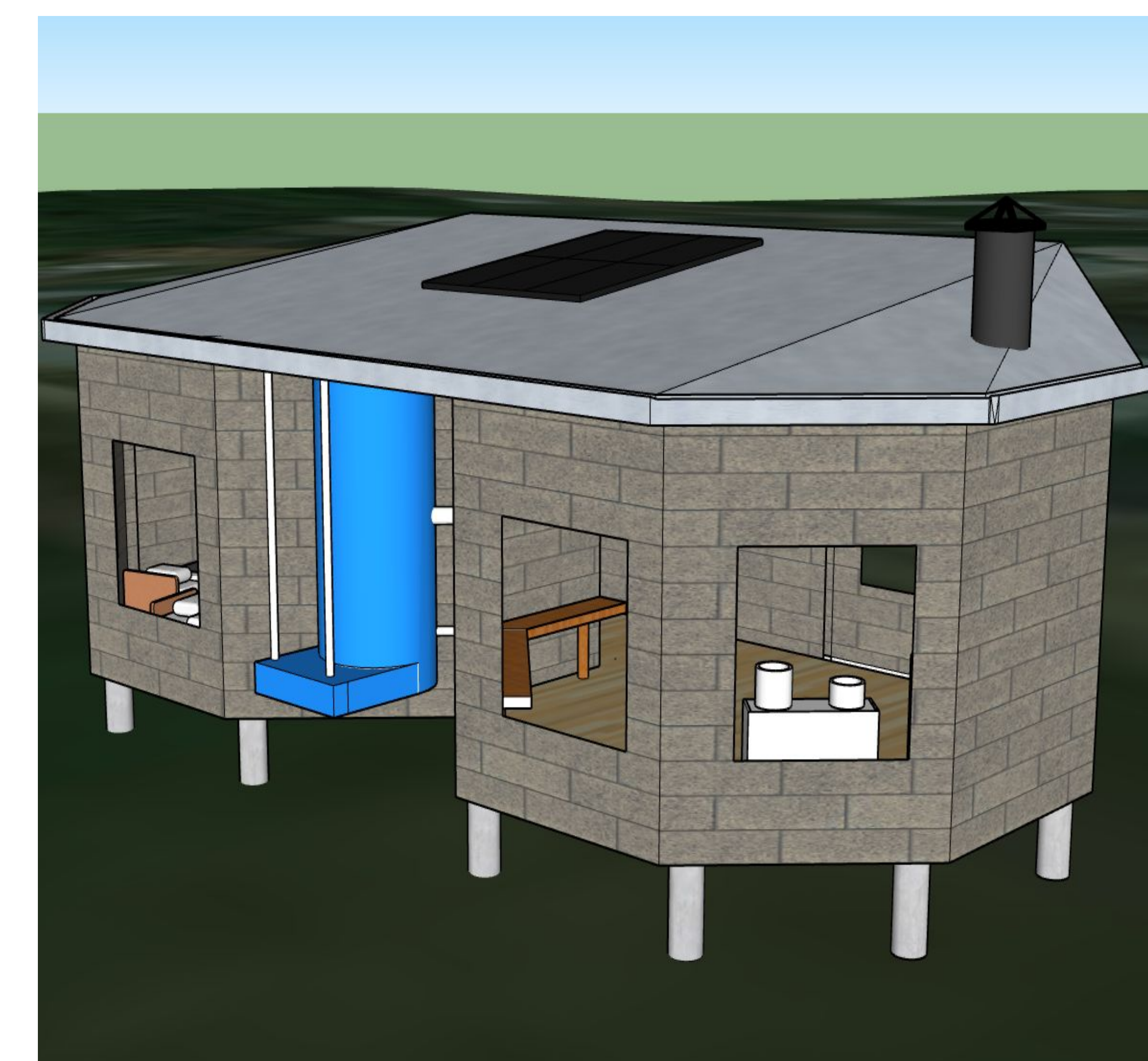
In 2018, over 35% of the rural population was affected by monetary poverty with 3.5 million citizens living in extreme poverty.

One in four individuals in the rural region of Chocó does not have access to clean drinking water.



Materials

Constructed with plastic bricks that is melted second-hand plastic pressured into a three-kilo brick. Intended to be thermoacoustic and earthquake resistant. Concrete stilts for stable foundation. Recycled sheet metal is used for the roof to reduce cost and stay environmental friendly.



Design Aspects

Water Tank: Simple rainwater collection and filtration system in order to provide fresh clean water to the residents.

Stove: Allows for cooking inside the home with proper ventilation through a chimney.

Stilts: Used to help prevent flooding in the home.

Recycled Plastic Bricks: Made by *Conceptos Plasticos*, a Colombian Company, that molds recyclable materials into bricks.

