Our mission is to help reduce neonatal and maternal mortality rates and improve the quality of healthcare available at the rural clinics and hospitals we serve in sub-Saharan Africa.

- The Gould Family Foundation
COUNTRY PROFILE - UGANDA

DEMOGRAPHICS AND MACRO ECONOMICS

UGANDA NATIONAL SYMBOLS
Flag
Coat of arms
National Motto: "For God and My Country"

DEMOGRAPHICS
Land Area - Total 241,038 km² (93,065 sq mi)
Water (%) - 15.39
Density - 157.1/km² (406.9/sq mi)
GDP (PPP) - 2017 estimate
  • Total - $91.615 billion [5]
  • Per capita - $2,165 [5]
Education & Literacy - 78.4%
Health Expenditure - 7.2% of GDP (2014)
Hospital bed density - 0.5 beds/1,000 population (2010)

JINJA DISTRICT REGIONAL MICRO PROFILE
Jinja District is a district in the Eastern Region of Uganda. The town of Jinja is the district’s main municipal and commercial center.

JINJA DISTRICT-ENVIRONMENTAL PROFILE

JINJA DISTRICT-PEOPLE, PLACE & CULTURE
• Jinja has the second largest economy in Uganda.
• Population - 387,600 (2002)
• It sits along the northern shores of Lake Victoria, near the source of the White Nile.
• Jinja is a major station on the Uganda Railway and is a port for Lake Victoria ferries.

LESSONS FROM OTHER MATERNITY FACILITIES IN UGANDA

Public gathering and community education
Roof ventilation strategies
Natural light and indoor natural ventilation
Local material and simple construction
ABOUT THE GOULD FAMILY FOUNDATION

Improving access to quality healthcare for mothers, infants & children

Our mission is to help reduce neonatal and maternal mortality rates and improve the quality of healthcare available at the rural clinics and hospitals we serve in sub-Saharan Africa.

Our Principles

- We will focus on serving community-based, non-profit “grassroots” health organizations.
- We will work with our grantee partners to Monitor, Evaluate and Enhance our programs.
- We will use 100% of all contributions to fund our programs.
- We will listen to & learn from our grantee partners.
- We will work with “like-minded” collaborating foundations to help their grantees, learn from them, and serve more of those in need.
- We will remember that our work is to serve our grantees and the communities they serve.

OUR MODEL

Helping qualified, community-based health NGO’s source and fund medical equipment and training.

Collaborating to equip and fund Maternal Newborn Health Clinics & Hospitals

Our Maternal Newborn Health Clinic - Hospital Upgrade Program connects qualified NGOs, operating rural hospitals and clinics in sub-Saharan Africa, with Build Health International, a leading source of quality donated medical equipment to the developing world. We work with collaborating foundations, like the Segal Family Foundation (SFF), to provide funding for the Clinic Upgrade Program.

The Problem

- Properly staffed and well managed rural hospitals & clinics in sub-Saharan Africa often lack basic medical equipment (e.g., an incubator).
- They are unaware of how to procure quality, low cost, donated medical equipment (new equipment is not an option due to high cost).
- They have limited or no funds to procure the needed equipment.
- Staff need training in neonatal & delivery protocols and standard operating procedures.

June 2017

HEALTH MISSION PROFILE- UGANDA

GOVERNMENT OF UGANDA, MINISTRY OF HEALTH- HEALTH SECTOR STRATEGIC PLAN III 2010/11-2014/15

Extract: 3.3.2 Cluster 2: Maternal and child health

Maternal and child health conditions carry the highest total burden of disease with perinatal and maternal conditions accounting for 20.4% of the total disease burden in Uganda (11). Some progress has been made in the improvement of the health of mothers and children in Uganda over the implementation of the HSSP II. The Road Map to accelerate Reduction of Maternal and Neonatal Morbidity and Mortality and the National Child Survival Strategy were formulated in 2007 and 2009, respectively. The effective implementation of these strategies will contribute significantly towards achievement of MDGs 4 and 5 by 2015

HEALTH STATUS OF THE PEOPLE OF UGANDA

- 1.2 million women become pregnant annually, of which 42% give birth in a health care facility and 17% utilize a traditional birth attendant.
- Approximately 15% of Ugandan women experience some complication during pregnancy or delivery.
- The country has one of the “highest maternal mortality rates worldwide at 550 deaths per 100,000 births as of 2011.” This statistic can be attributed to a number of factors including:
  - the lack of access and utilization of health care facilities.
  - the high fertility rate across the country.
  - a majority of the population living below the poverty line.

MATERNAL STATISTICS


The Prototype Intent (Brief)

Develop a Maternal Newborn Health Centre prototype that includes an outpatient clinic (including a lab, pharmacy, and community health area) and a maternity centre. The prototype should take into consideration issues such as:

- Ventilation
- Shading/screening
- Local materials and aesthetics
- Cultural activities such as gathering spaces.
ROOF OPTION A

Student Dormitory in Kampala, Uganda
(Terrain Architects / 2015)

1. Roof Construction
   Aluminum IBR roof sheeting supported by exposed, pitched steel beams

2. Entry
   Translucent Polygal sheet for roofing over entry

3. Wall Construction
   Thick masonry walls with stabilized earth to increase thermal control

4. Windows
   Windows set on the interior of the masonry walls to increase passive shading strategies

5. Brick Pattern
   Perforated sections of wall allow for cross ventilation

6. Water Collection
   Gutters line low points of the pitched roofs, directing water to a collection system

7. Solar Collection
   Option to place solar panels on pitched roofs

Multifunctional Centre in Uganda
(Michele Verdi, Francesca Tafti / 2014)

June 2017
**ROOF OPTION B**

1. **Roof Construction**
   - Aluminum IBR roof sheeting supported by steel trusses
2. **Entry**
   - Translucent Polygal sheet for roofing over entry
3. **Wall Construction**
   - Thick masonry walls with stabilized earth to increase thermal control
4. **Windows**
   - Windows set on the interior of the masonry walls to increase passive shading strategies
5. **Louvers**
   - Louvers cover the structural steel trusses in the roof, allowing for cross ventilation
6. **Water Collection**
   - Gutters line low points of the pitched roofs, directing water to a collection system
7. **Solar Collection**
   - Option to place solar panels on pitched roofs

---

Ludwig Pavilion Tuberculosis Hospital in Port-au-Prince, Haiti (MASS Design Group / 2015)
PROPOSED PROTOTYPE

ROOF OPTION A

South Elevation 1:200

East Elevation 1:200

Section 1 1:200

Side

Entrance

Rear
SUSTAINABILITY ANALYSIS

Solar
Option for solar panels on roof.

Water
Gutters along roof lead to water basin for rain collection.

Shade
Roof overhangs and deep windows offer passive shading strategies.

Ventilation
Perforated bricks offer a cross ventilation strategy.

Thermal
Thick masonry walls increase thermal mass.
MATERIAL ANALYSIS

ADOBE BRICK WALLS

POLYGAL

PERFORATED BRICK

ALUMINUM IBR

POLISHED CONCRETE