



Project Naama: Community Health and Development

Nancy Yang

Benjamin N. Duke and Trinity Scholarship International Summer of Service 2010



Scholar Profile

Scholar: Nancy Yang
Graduation Class: 2012
Major: Public Policy, Pre-medicine
Minors: Chemistry, Psychology
Hometown: Greensboro, NC
Carolina Summer of Service: Intern at the Northeastern Rural Health Network and Chesterfield County Coordinating Council in Cheraw, SC



Where: Mityana and Naama, Uganda



Uganda Facts:

- **Capital city:** Kampala
- **Government:** Republic
- **Religions:** Christian 85%, Muslim 12%, other 2%
- **Languages:** English (official); Luganda and numerous other local languages.
- **Education:** 54% complete primary school
- **Health:** infant mortality rate: 78/1,000 // life expectancy: 51 yrs // 5.4% HIV/AIDS rate

Naama village facts:

The village of Naama encompasses about 20 schools and several churches and mosques. The community survives on subsistence farming, with some fishing and petty trade. Clean running water and electricity are scarce.

Daily life in Uganda



Left to right: 1) Common foods: rice, beans, chapatti, eggplant, (not pictured) matooke, nakati (greens), sweet potato, cassava, posho, rolexes, and mandazzis 2) Mityana town market 3) Kolping House – our lodgings 4) back road to Naama village

What – The summer of service project

Project Naama is a collaborative effort between the Duke Global Health Institute, Duke University students, Dr. Christopher Kigongo of the Duke Medical School, and the community of Naama, Uganda. Our goal is to work together to improve the health, well-being and general development of the entire village.

Summer 2010 was the third year of the project. The 2010 team consisted of 10 undergraduate students from a variety of backgrounds and disciplines.



(Left): Project Naama team with Naama Millennium teachers. (Right): Project Naama team with Dr. Kigongo (faculty advisor) and Zziwa Musah (translator and guide) outside Kolping House: Women's Project.

The following projects were implemented this summer:

- Science and nutrition lessons
- EMS health insurance program
- Community wide health fair
- Solar water disinfection project
- Research on palliative care, maternal and child nutrition, emergency obstetric services, water purification and sanitation, and traditional medicine.
- Girls' life skills club
- Women's microfinance group
- Teacher technology training
- Afterschool sports club and leadership club

Naama Millennium Preparatory School



Naama Millennium Preparatory School was the primary community partner. This partnership was established through Dr. Christopher Kigongo, a physician at the Duke Medical Center who was born and raised in Naama. Naama Millennium is a primary school that provides education for over 300 students from Naama, along with housing for orphans. The school serves as a model for and a stepping stone in the development of the whole community.

Naama Millennium Mission: to reduce the exposure of children, especially orphans, to life threatening risks while preparing them for a challenging and productive future.

Science and Nutrition Lessons at Naama Millennium

Science lessons were developed and taught at Naama Millennium. Lessons were designed to engage students in science and to spark the students' scientific curiosity. Nutrition lessons were designed to help students eat more balanced meals and to understand the importance of various micronutrients.

Lessons included:

- Cells + cell models
- Nervous system
- Density + density rainbows
- Slime
- Egg Drop
- Engineering + tower building
- A balanced diet
- Micronutrients and you
- Sanitation and hygiene
- Food and your health



(Left to right): 1) Second grade students hold up their cell drawings 2) Teaching the nervous system 3) Sixth graders build towers out of variety of materials 4) Fourth grade teacher models his ScienceDays t-shirt

Solar Water Disinfection (SODIS) Project

What is SODIS?

A low-cost point-of-interest method of water purification that uses the sun's UV rays to kill microorganisms in water. Contaminated water is filtered into transparent PET plastic bottles and exposed to full sunlight for six hours.

SODIS research:

Fifty households in Naama village were surveyed to assess their current water sanitation practices and to determine their knowledge of and perspective towards implementing SODIS.



(Left): Water bottles on the drying racks. The water is being purified by the sun's UV rays. (Right): Students eagerly show off their water bottles for SODIS.

SODIS at Naama Millennium:

Majority of the 370 students at Naama Millennium go the entire school day without drinking water. SODIS was implemented at the school in partnership with The Water School Uganda, Namayumba Community Development Project and Naama Millennium Primary School.

Accomplishments included:

- Teacher and student training
- 7 racks and 1 large storage shelf built
- 2 water bottles distributed to each student

Second Annual Naama Health Fair

Working with various local health organizations and the Naama community, we helped host the 2nd annual Health Fair. The health fair included screenings for a variety of diseases (including HIV, vision, etc), basic treatments, drama and music performances, and health lectures from a variety of doctors and health workers. Over 1000 people attended.



(Upper-left): Registration line for the Health Fair. (Upper-right): Naama Girls' Health Club's booth at the Health Fair. (Bottom): Advertisement for the Health Fair. The banner is written in Luganda, the primary local language.

Naama Sports Tournament and Sports Club



(Left to right): 1) Our team leading the afterschool sports club with third graders. The afterschool sports club consisted of soccer drills, netball practice, duck-duck goose, red-light green light, etc. It was one of the best times to really get to know the students. 2) The girls compete in net ball at the sports tournament 3) The boys compete in soccer at the sports tournament 4) The younger students compete in various relay races during the sports tournament.

Exploring the beauty of Uganda



1. Outside Parliament in Kampala 2. Tropical Rain Forest near Mount Rwenzori 3. Kisoro mountain range 4. The Nile River 5. Crater Lakes in Fort Portal 6. Giraffe spotted during a safari at Murchinson Falls 7. Murchinson Waterfalls 8. Horseback riding along the Nile in Jinja 9. Botanical gardens in Fort Portal.

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