

Developing Another World: Mugonero, Rwanda An Engineers Without Borders Johnson Space Center Chapter Project www.ewb-jsc.org

In a small chapel, on the grounds of a missionary hospital overlooking the Congo and sparkling Lake Kivu, 3,000 people were massacred in 1994. The Mugonero community still struggles with rebuilding after these brutal acts.

Mugonero sits atop a hill on the western border of Rwanda, accessible only by a red dirt road riddled with bumps and hairpin switchbacks. The Mugonero Hospital relies on facilities and utilities that have deteriorated through the decades and destruction. In 1994, 3,000 people hid in the Hospital Chapel to escape the genocide which eliminated a third of the population in the province of Kibuye. The priest in the church wrote an appeal to a neighboring church leader that in part said, "We wish to inform you that tomorrow we will be killed with our families." Instead, the other priest sent the military to the complex, and they killed almost every person in the building, damaging many facilities in the process.

With the magnitude of the destruction that occurred in Mugonero and the rest of Rwanda, the challenge of rebuilding the community is immense. Community leaders are working everyday towards improving the quality of life for everyone. Where you might expect a feeling of helplessness, there is instead a common determination to rebuild.



Completed Projects

- EWB-JSC installed 10,000 liter rainwater catchment system for hospital
- Assisted EWB-CU install solar powered lighting systems for hospital
- Assisted EWB-CU install UV water sanitation system for hospital
- Assisted EWB-CU install biogas generators

Water Provisioning Plans

Install gravity and solar powered water treatment system for Mugonero Orphanage

Energy Provisioning Plans

- Expand biogas technologies to provide reliable source of cooking energy
- Expand solar lighting and energy systems

In May 2005 a team from Engineers Without Borders-USA (EWB-USA), including engineers from the Johnson Space Center Chapter, visited Mugonero while conducting a project in another border community. The team was hosted by the Mugonero Hospital director, Dr. Mark Ranzinger, an American surgeon. Dr. Ranzinger introduced the team to other hospital personnel and presented the needs of the facility.

The hospital services a large region in the province of Kibuye. Five clinics feed into the hospital, as well as several local schools. The L'Esperance Children's Aid Orphanage partners with the hospital for the health care needs of the orphans. Founded in 1995 for genocide orphans, the facility now houses younger AIDS orphans as well as adults who grew up there and have nowhere else to go.

The hospital and orphanage are in need of reliable sources of quality water and clean energy. EWB-USA implemented solar powered lighting solutions for the hospital in January 2006, and EWB-JSC implemented a 10,000 liter rainwater catchment system for the hospital in June 2006.

EWB-JSC is actively planning to return to Mugonero to implement water and energy solutions for the community while continuing to identify and address other needs. The chapter is raising funds to support these efforts from local, national and international grants.

Dr. Ranzinger recently wrote the EWB team, "I keep being asked 'Where did you find these guys?' To which I can only answer, ... the grace of engineers in the US who have looked beyond their own borders as to how they can be a power for good and development in the world." Mugonero is again asking for help, and EWB-JSC is ready to respond.

How you can make a difference:

Send a check or money order to EWB-USA and write "EWB-JSC Donation" in the memo of your check (all donations are tax deductible).

Send your donation to: Engineers Without Borders – USA

1881 Lefthand Circle, Suite A-1

Longmont, CO 80501

Or go to our website at www.ewb-usa.org and click on the "donate" link, and select the South Houston JSC Chapter.