Deaconess Nundu Hospital Solar and Water Project

September 2018

Randy and Alice Matthewson are retirees who have traveled to eastern Congo numerous times to assist the Free Methodist Church of the Congo. They return to Nundu in mid-September for the final installation of the solar and water systems.

Construction of the Nundu solar power system was completed in July 2017 by a team of I-TEC (International Technical Electrical and Construction) volunteers in Montoursville, Pennsylvania. A water filtration system powered by solar electricity is included in the project.



Power Pac under construction



Packed and ready to go

The container was shipped in August and arrived at Nundu the last week of November 2017.



Solar container departing Montoursville, PA



Solar container arriving at Nundu

The container with the components for solar electric and a water filtration system has been secured. A well has been dug. We are ready for final installation, September 23 to October 7, 2018. Please continue to pray for the successful competition of this project.

NUNDU TRANSFORMATION DELAYED

December 2017

Randy and Alice Matthewson are retirees who have traveled to eastern Congo numerous times, assisting the Free Methodist Church of the Congo in various projects. They flew to Bujumbura, Burundi, in mid-September planning to spend six months at Nundu in South Kivu, an eastern province of the Congo. They were expecting the arrival of a 20 foot container packed with solar power and water systems, systems which would transform the station. But upon arriving in Bujumbura, Burundi, they found that rebel activity around Nundu made travel unsafe. The Bishop of the Free Methodist Church of the Congo gave his instruction to remain in Bujumbura until it was safe to travel.

Located at Nundu is Deaconess Hospital, a full-service Free Methodist hospital that has not had reliable running water or electricity for many years. The hospital oversees a network of health centers and maternities, serving a population in excess of 183,000.

The Democratic Republic of Congo (DRC) endured a period of civil war from 1996-2004. Despite the resulting political and economic instability, Nundu Hospital has continued to function under the leadership of national doctors and nurses.

For many years Nundu depended on a diesel generator, but with present budget realities diesel fuel has been increasingly more expensive. In addition, water had been provided by a diesel powered water pump. However, when the nearby Sanja River changed course, the well and pump were destroyed. How was Nundu to address the power and water needs of the hospital?

Solar technology has become more efficient and is now readily available, providing an immediate, affordable source of electricity. CAHO collaborated with I-TEC (International Technical Electrical and Construction), located in Montoursville, PA, to build a 17 kilowatt electrical system

Construction of the Nundu solar power system was completed in July by a team of volunteers. A 25 kilowatt diesel generator was built into the system as a back-up. In addition, a water filtration system powered by solar electricity, will provide 10 gallons of water per minute. Also included in the shipment are LED lights, an LED surgery light, small sterilizers, oxygen concentrators and shop equipment.

About two weeks after arriving in Bujumbura, near the end of September, the Matthewsons were given clearance by Bishop Lubunga to travel to Nundu. The container, into which the solar electric system was built, had been shipped out of Louisiana in mid-August and arrived in Dar es Salaam, Tanzania, mid-September, on schedule. From there it was to have arrived at Nundu by mid-October, in preparation for installation of the electrical and water systems by the I-TEC team in early November. But this was not to be. Political unrest delayed the transport of the container by truck from Dar es Salaam to Nundu, and I-TEC found it necessary to cancel its trip to the Congo.

Pray that political stability will return and that the I-TEC team will be able to travel to Nundu soon. Yes, the container safely arrived at Nundu just before Thanksgiving, and for its safe arrival we give thanks. Reliable solar electricity and an adequate source of clean water will enable the hospital to function at an efficient and sustainable level, a transformation which is urgently needed. But for the present, water will carried by hand and limited electricity is the norm. Pray for Randy and Alice, that they will be safe and encouraged during these uncertain times. Yes, Nundu transformation is delayed, but we believe we will see transformation in God's time.





Randy Matthewson assisting with unloading the container.

NUNDU HOSPITAL SOLAR & WATER PROJECT UPDATE

May 5, 2017

<u>Peaconess Nundu Hospital is a full-service Free Methodist hospital will have reliable running water or electricity soon!</u> The hospital has needed a reliable and sustainable source of power for many years. The hospital is the hospital of reference for the region of South Kivu, a western province of the Congo, and oversees a network of health centers and maternities. Nundu now has a 120 bed capacity, providing surgical and maternity services for a population in excess of 183,000.

We have been blessed to have such a broad base of support. I-TEC based at Montoursville PA is currently outfitting the container with solar (Power PAC) and water filtration components Water Mission). The container will be shipped in July with planned arrival in the DRC in September. Randy and Alice Matthewson will provide on-site support. A team I-TEC volunteers will provide the technical expertise needed to install the PowerPac and water filtration system.















For many years Nundu depended on a diesel generator, but with present budget realities diesel fuel has been increasingly more expensive. Water had been provided by a diesel powered water pump. However, when the nearby Sanja River changed course the well and pump were destroyed. We find it unacceptable that Nundu Hospital has been left without running water and an affordable, reliable source of electricity.

Solar technology is now available, providing an immediate, affordable source of electricity. We have contracted with International Technical Electric and Construction (I-TEC) located in Pennsylvania to build a 17 KW solar power system. To run the higher energy demanding equipment at the hospital, such as the x-ray and sterilizer, a 40 KW generator will be included. A water filtration system will also be included, producing 10 gallons of water per minute.

Reliable energy and an adequate source of clean water will enable the hospital to function at a more efficient and sustainable level.