



SIEMENS WATER TECHNOLOGIES WORLD WATER DAY PROJECTS 2008 in TIMOR-LESTE

BACKGROUND:

Siemens Water Technologies (SWT) employees and Siemens Caring Hands recently raised funds to support two potable water projects. This global initiative of SWT was a direct result of an internal SWT fundraiser in support of World Water Day March 22, 2008.

The SWT World Water Day projects have resulted in outstanding outcomes for the people of Timor-Leste. Two separate projects were commissioned in August 2008. Both provided safe potable water to desperately needy people who currently had no access to safe pure water.

The Hope Community Orphanage located in Gleno has 36 children. Also the Bairo Pite Clinic in Dili services over 300 people daily. The SWT project in conjunction with the SkyJuice Foundation installed two complete water plants which are now fully functional.

Siemens WT in Sydney graciously offered to send a volunteer to assist in the installation and commissioning of the units. Mr Peter Zauner volunteered his services. Peter has had vast experience in the voluntary humanitarian sector and was invaluable to the success of these projects. The SkyJuice Foundation also sent two experienced volunteers, David and Jann Hughes. SkyJuice had been liaising with an Australian health care not for profit organisation, Australian Aid International. AAI was instrumental in identifying the location, site preparation and monitoring the completed projects.

WHY DID WE SELECT TIMOR-LESTE?: On the United Nations Human Development Index, the Democratic Republic of Timor-Leste is one of the poorer countries and is ranked 150 out of a total of 177 countries. Per capita income was US\$358 in 2005 and more than 40% of the population live below the poverty line. The United Nations estimates that only 20% of the population have access to safe water and only 15% to sanitation facilities.

In 1999, Indonesia relinquished control of East Timor and Timor Leste became the first new sovereign state of the 21st century in 2002. The violence that followed Independence led to the destruction of public buildings, roads, health and water



SNAPSHOT of TIMOR-LESTE (formerly East Timor)

Life expectancy at birth:
59.7 years

Child under 5 mortality rate:
61/1000

Mortality rate between 15 – 60 years:
Male 24 Female 166 per 1000

40% of the population below poverty line facilities in Timor-Leste



infrastructure. Timor-Leste, with a population of only one million inhabitants has suffered huge human and social costs as a result of its 25 year independence struggle.

Lack of safe water and sanitation infrastructure are major contributors to the high rate of deaths of children under five in Timor-Leste. Unsafe water and inadequate hygiene are leading factors in water related diseases such as diarrhoea, dysentery and pneumonia.

PROJECT ONE

THE NEED - Hope Community Orphanage in Gleno

The village of Gleno is located approximately 1.5 hours south of Dili, yet it is quite remote as the roads are difficult to negotiate and car ownership is beyond the means of most Timorese people. The Hope Community Orphanage was founded by Mr Isa Bradridge and Mrs Ina Bradridge in 2004 and currently offers refuge to 35 children. Five adults work and live at the orphanage and Hope also offers a free kindergarten for all the local children.

The Hope Orphanage desperately required safe water in the facility to ensure that the children have every opportunity to

develop their full potential. SkyJuice tested the existing water supply (town water) which had high levels of bacteria. The orphanage currently purchases bottled water for all potable requirements. When they run out of funds they boil the water which still leads to low levels of gastrointestinal diseases.

Bottled water costs USD1.00 per 10 litres, this equates to USD100.00 per kilolitre. The orphanage currently uses approximately 100 litres per day for drinking water and due to the expense of bottled water, they use untreated town water for cooking.

THE SOLUTION:

The SkyJuice water purification unit (SkyHydrant) is economical, compact, robust, easy to transport and ideal for remote locations. There are virtually no ongoing costs for the orphanage as the purification process does not require chemicals or power which is perfect for Hope Orphanage as there is only intermittent power after 6.30 p.m. Notionally, the SkyHydrant can produce up to 1000 litres of clean water per hour depending upon the feed water, which will be abundant for the communities' requirements. The staff at Hope Orphanage will also offer the safe water to the surrounding community.

It was important that the project was sustainable and maintained community support. SkyJuice involved the orphanage community in the construction of the water system. We had many willing helpers with good ideas! The staff will be responsible for continued operation of the water project



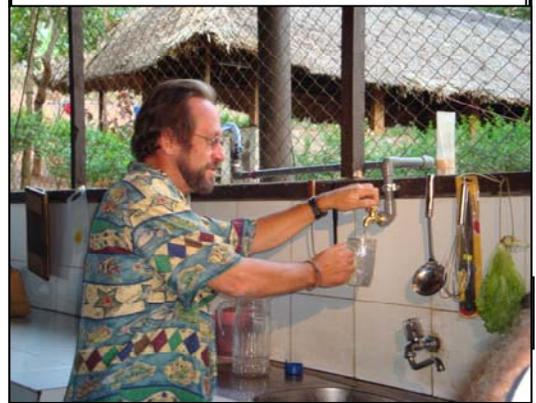
Hope Orphanage in Gleno



Hope Orphanage kitchen facilities



Siemens WT volunteer Peter Zauner preparing the site along with staff and children from Hope Orphanage



and SkyJuice will be available to provide ongoing support. To ensure the success of the project the children and staff at Hope Orphanage will be provided with hygiene education regarding the importance of using safe water for drinking.

Mr Isa Bradridge, principal of the Orphanage, has worked in Timor Leste for 10 years thanked SWT and emphatically declared *'I have worked and lived in Timor Leste for the past 10 years and this is the first time I have been able to drink water straight from the tap – thank you for your generous donation. Your generosity will have an immediate impact on the lives of everyone in this orphanage and the surrounding community'*

The cycle of poverty resulting in poor health, lower incomes and lack of education cannot be broken without improving access to basic needs - safe water being fundamental among them. Hope Community Orphanage now enjoys access to continual free safe water thanks to the donations for World Water Day 2008. Thanks to every individual contributor.

Peter Zauner, from Memcor, Windsor volunteered to accompany the SkyJuice team to install and commission the World Water Day projects. Peter has previously volunteered on humanitarian projects, and from his experience he stated that *"The SkyHydrant makes good sense in the context of East Timor where one of the main problems is that water supplies show high counts of bacterial contamination which is safely removed by the filter. The SkyHydrant's design and technology are very appropriate for this context with no electricity needed for its operation and all cleaning steps are simple and carried out manually"*



Hope Orphanage community enjoy free safe water



PROJECT TWO THE NEED - BAIRO PITE CLINIC - DILI

Dr Dan Murphy founded the Bairo Pite Clinic (BPC) in Dili in 1999 after the Indonesian withdrawal that saw thousands of refugees returning to the capital with tuberculosis, malaria and malnourishment. Located in Timor-Leste's capital city of Dili, the clinic provides free health care services to the local population.

On average, the clinic services 300 plus patients per day, with a strict policy that everyone must be seen. The clinic also serves as an inpatient facility and has many patients and families staying on location. Originally, the clinic was set up to serve the immediate needs of a population affected by the initial humanitarian crisis. As the violence has subsided, BPC has adapted and transformed from an emergency medical service to a more comprehensive community health service. Primary health care is a top priority for the BPC and provides a variety of services, such as childhood immunizations, pre-natal care, dental work, emergency services and seeking diagnosis and treatment for the most serious health problems



Bairo Pite Clinic – Dili. On average the doctors see more than 300 patients per day



including malaria, tuberculosis, dengue fever, dysentery, leprosy and child mortality. BPC also operates a medical laboratory, pharmacy, kitchen and laundry.

The local population is reliant on either contaminated town water supply or unprotected bore water sources which are prone to contamination throughout the Dili region. Even bottled water would not pass Western standards for water quality. Water is a major issue at PBC.

THE SOLUTION:

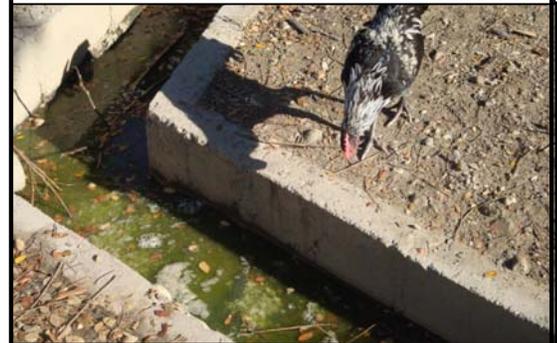
SkyJuice’s in country partner, Australian Aid International (AAI), organized the construction of a two tiered tank stand, concrete footings and water tanks to be ready on site. Once again the clinic staff were consulted as part of the community engagement program and offered advice on water usage, appropriate location, distribution points, security and operational issues. The clinic nominated the head of security and maintenance to monitor and maintain the unit.

The source water is town water, which is pumped to the header tank approximately 4 metres high. The water is then gravity fed through the SkyHydrant to the filtrate tank and then to a three tap distribution point. The distribution points are readily accessible to all patients, staff, and nearby kitchen facility. Our partners in Timor Leste, AAI, are a health care not for profit agency with full time staff in Dili. AAI have agreed to regularly check that the SkyHydrant is being maintained correctly. They will also be actively involved in preparing material on safe water practices and hygiene for all patients and staff.

The patients and staff were very appreciative to have clean water available on site and were quick to start filling up their containers. A real tangible and immediate bonus of this project is that the money saved by utilizing this free safe water will go towards better free health care facilities for the community.



Checking final details with the clinic staff and Dr Dan Murohv



Open drain within clinic grounds



Peter Zauner volunteer from SWT and David Hughes volunteer from SkyJuice Foundation commence work on filtrate tank installation



Peter Zauner summed it up well when he said *“I am proud to now work for a company that has solutions to offer for the world's needs, such as BPC. I was happy to volunteer my time for the project in East Timor and found it a rewarding experience”*

SUMMARY

The funds collectively raised by individuals and donated by SWT for World Water Day 2008 have been well spent for the benefit of the Timorese community. These safe water projects are more than just water infrastructure projects. The projects demonstrate that the collective efforts of employee participation through Siemens Caring Hands combined with cost effective appropriate technology to those in need.

The Timor-Leste projects resulted in a powerful impact on this community. The funds were leveraged to produce a material outcome and tangible results. This project demonstrates that a simple initiative undertaken by generous and committed individuals can enhance our human spirit. Most importantly, the concept that global neighbours can care for each other is exemplified by these successful projects.

Well done SWT and everyone who contributed to this impressive World Water Day project 2008

The SkyJuice Foundation would be pleased to identify further beneficial projects and work closely with the staff of Siemens to give disadvantaged communities access to safe water.



Banner noting funds donated by SWT and SWT employees for World Water Day 2008



One of the many beneficiaries at Bairo Pite Clinic in Dili, Timor-Leste