## BRINGING CLEAN WATER TO ELLANDOPPU

## Peter Coughlan

The inaugural issue of Asia Pacific Peace Studies journal features a selection of publications and public initiatives sponsored by the Asia Pacific Peace Studies Institute (APPSI) in the three years since its inception in 2013. We at APPSI are honored to partner with WaterBridge Outreach: Books + Water, which focuses on "donating books in English and local languages and funding water and sanitation projects in communities and villages in the developing world." The organization seeks to promote multicultural literacy, educational opportunity and community development. Waterbridge Outreach is currently engaged in grassroots projects with local partners in Haiti, India, Malaysia, Pakistan, the Philippines, and Tanzania. This essay describes the unfolding and impact of a community-based water project in Tamil Nadu, India. In the next issue of Asia Pacific Peace Studies, we will present further updates on WaterBridge Outreach projects in the same region—including those supported by APPSI.

Ellandoppu is a poor village in the northeast of Tamil Nadu, which is the southernmost state of India with a growing population of more than 75 million people. Although many of the neighboring villages are predominantly Dalit, the name somewhat loosely applied to groups formerly known as "untouchables," people in this particular village belong to what is known as an MBC caste. In the hierarchy of castes these are considered slightly "higher" than Dalits, even if the acronym MBC stands for a "most backward caste," a title that strikes an odd note to anyone unaccustomed to the complexities of the caste system.

Ellandoppu lies some miles outside Mamallapuram (Mahabalipuram), which in earlier times was a lively and important port on the ancient trading routes between East and West, and today is a thriving tourist center. Chinese and Roman coins dating back to the fourth century CE have been found there. Its amazing rock carvings, from the time of the seventh and eighth century Pallava dynasty, have been described by many as one of the wonders of ancient India.

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Just beyond Mamallapuram's golden beach, with its colorfully decorated and high-powered fishing boats, people come from far and wide to see the famous Shore Temple. It is a sanctuary adorned with thousands of sculptures in honor of Shiva—one of the three gods, which, along with Vishnu and Brahma, comprise what is often described as the Hindu or Great Trinity. Most impressive of all, for me at least, is an area dedicated to the monolithic and beautifully sculpted *rathas*, or five "chariot" shrines, each one of them carved on the spot from a single piece of granite. A huge and exquisitely carved elephant, he too sculpted from one massive block of granite, stands guard at the side of the ratha shrines.

Nearby is a gigantic open-air relief, carved directly out of the rock with a panoply of elephants and other animals, people and gods assembled to celebrate the Descent of the Ganges, the river most sacred to Hindus. This sculpture, which stretches along a rock face for over a hundred yards, is also called Arjuna's Penance. It is so-named after the ascetic figure of Arjuna, standing on one leg with his hands joined above his head, supplicating the gods for a favor. One of the memorable features in this rock sculpture is the mischievous figure, lower down on the right-hand side of the rock, of a cat standing in exactly the same posture as the ascetic Arjuna before an audience of excited kittens—a delightful touch of humor within a religiously inspired and magnificent work of art.

Ellandoppu, by contrast, has no such glories. There is a brightly decorated shrine venerating the Elephant-Headed Ganesh, one of the best known and most popular in the Hindu pantheon of deities, but that's about it. Very close to the Ganesh shrine there is the Ellandoppu Village Community Center, constructed by SAVE-INTL (South Asian Village Empowerment International). This serves nightly and on the weekends as a tuition school to help the Tamil students learn English, a necessary passport to their future, and to offer free coaching for the all-important national tenth grade exams. WaterBridge Outreach has donated books for use in this tuition school.

When I was there in 2012, Curt Degler, president of SAVE-INTL, and I met with the village headman and his associates to talk about their water problem. They had no clean water for drinking, washing pots, and general sanitation. The already toxic state of the water had deteriorated further after the infiltration of salt water from the sea following the earthquake and tsunami of October 25, 2010, which devastated islands off of Sumatra and also caused damage as far as Tamil Nadu.

Discussions went back and forth in the following months. At Water-Bridge Outreach we judged that if we constructed a reverse osmosis (RO) system, which would enable the water to be pushed forcefully through membranes designed to remove the salt and most of the toxins, SAVE-INTL and WaterBridge Outreach would be able to bring clean

drinking water and better sanitation to the villagers, as well as to the children who come from the surrounding area to use the tuition school.

Before moving forward we needed to be reasonably certain that the villagers would play their part in preparing the way for the RO system and, very importantly, in the necessary maintenance afterwards. Curt already knew the headman and felt this was a village we could work with, being fairly confident of how the funds would be utilized in a country where corruption is a phenomenon with which all Indians are only too familiar. As a pledge of the villagers' seriousness we asked that they construct a small building that would be able to house the RO system. The photo below captures this small structure in the process of being built.



Photo © WaterBridge Outreach

The photo on the next page shows Sonny Saravanan—managing director of the Indian nonprofit Tamilnadu Village Outreach (TVO), who works closely with Curt Degler of SAVE-INTL and helps keep a close eye on the way funds are used and on the quality of materials used in construction—in front of the RO machinery together with the headman of the village. The last photo shows the finished construction from the outside, as well as Curt and villagers collecting water.

This is the first of the RO systems we have financed in this area and it is very encouraging to know that it is working well. The water has gone through comprehensive testing at a government laboratory and is so pure that the villagers are now selling water to neighbors at the very accessi-

ble price of two rupees for 15 liters of water. Curt himself is now using this as his drinking water. As time goes on the most important issue will be maintenance—so often a problem with the water systems installed by outside organizations in areas of the developing world. In Tamil Nadu we are, as far as possible and together with SAVE-INTL, building maintenance into our water programs to try to ensure lasting long-term impacts.



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Project by grassroots project and working alongside others with local knowledge, we at WaterBridge Outreach see our work with books and literacy as going hand-in-hand with what we aim to do in terms of clean water and sanitation. The latter is an essential part of the infrastructure that allows education. That in turn will enable the villagers and young people themselves to serve and develop their own communities. The experience of the RO system at Ellandoppu is an encouragement for us to do more of the same, step by careful step.