

# Light up Maucatar

## Keeping a medical clinic operating



In September 2017 Richard Johnston joined seven other travellers on a nine-day eco-tour run by local social enterprise Timor Adventures to install much-needed backup power for a remote medical clinic. He describes the tour highlights and some of what he learnt about Timor Leste along the way.



↑ Timor Leste's rugged geography presents unique challenges to the country's development.

IN LOCAL legend, the rugged island of Timor was formed from the body of a crocodile in gratitude for the kindness shown to him by a local boy. Upon dying the crocodile grew and grew; his ridged back became the mountains of Timor and his scales the hills. The legend lives on to today, as when the people of Timor Leste swim in the ocean, they enter saying, "Don't eat me crocodile, I am your relative." Jagged peaks and ridges ring the capital Dili and seem to stretch on forever. Timor is about as mountainous as Switzerland, with almost half the land having a gradient greater than 40 degrees.

Heading to Timor Leste in September with seven other travellers on a nine-day eco-tour run by local social enterprise Timor Adventures, we learnt a lot about the

country's history and current challenges. A highlight of the tour was helping with the installation of a solar/battery system at a medical clinic and water tanks at a primary school at a remote outpost in the south-west. The solar/battery system was designed by ATA's International Projects Group to provide backup during frequent power failures, to power the clinic's birthing suite lights, cooling fans and vaccination fridge. The project was financed by donations from tour participants.

### A bit of history

Timor has over 42,000 years of pre-European history. At the time of first European arrival, Timor was comprised of many small chiefdoms and had at least 14 distinct

languages, many of which survive today. Timor Leste's official languages are now Tetum and Portuguese, which are spoken in addition to Indonesian, Tetum dialects and local languages. English is taught in school and is often used in business.

In 1515 Timor island was divided between Dutch Timor in the west (now Indonesia) and Portuguese Timor Leste in the east. The population suffered under often-brutal Portuguese colonial rule for centuries.

Timor Leste, as a colony of Portugal, was not initially involved in World War II. However, the war came to the country with the landing of Australian troops, pursued in rapid order by Japanese troops. Following a campaign of guerrilla warfare with Timorese partisans against the Japanese, the Australians were evacuated in 1942. After the Australians left, Timor Leste partisans continued to fight the Japanese and 30,000 to 40,000 Timorese were killed before the war ended.

Portugal resumed colonial control of Timor Leste after the war, only abandoning its colony in 1975 following the collapse of Portugal's 40-year-long Estado Novo authoritarian regime. Eager to avoid the country falling into communist hands, neighbouring Indonesia invaded and claimed Timor Leste as its 27th province.

The Indonesians built much-needed schools, roads, power and other infrastructure and provided civil services. However, Indonesian rule involved suppression of political opposition and dissent. Timor Leste's political opposition became either guerrilla fighters fleeing to hillside bases or part of the Timorese diaspora trying to make change from outside.



↑ The work of 'friends of' groups is a frequent sight. Here, chairs have been donated by the Port Phillip Friends of Suai group.



↑ Shirley Carlos from Timor Adventures making friends at Wild Timor Coffee in Aileu.

The Indonesian army attacked the guerrillas' bases using American-supplied counter-insurgency weapons and training. Agent orange and napalm, accompanied by constant bombardment of the civilian population, inevitably weakened the resistance. Many of the hills are still bare. Outside Dili, the population was deliberately and systematically starved.

Following almost 80% popular support in Timor Leste's 1999 UN-brokered independence plebiscite, the Indonesian army and many of their local supporters left the country, leaving a trail of destruction in their wake. Much of the damage is still visible today.

Timor Leste today is a peaceful democratic country of 1.3 million people, 60% under the age of 25. One-third of the population lives in the capital Dili. Outside Dili many people live a subsistence existence on incomes of less than US\$2 per day and have limited access to health care. Around 30% of the population has no access to piped drinking or filtered well water, and only 70% can read and write.

Successive governments and overseas aid agencies have sought to grow and broaden the economy away from its high reliance on fossil fuel royalties. The government is investing heavily in schools ensuring that most children get a primary education.

The country is very dependent on foreign aid. Wherever one travels in Timor you will find evidence of the many aid programs, including the work of dozens of Australian community-to-community 'friends of' groups.

ATA members have been active in Timor since 2003, working in partnership with communities in Timor Leste to provide clean,

renewable lighting and electricity to 1960 houses through installation of solar-powered lighting and power systems, and training of local installers and technicians in concert with local training provider CNEFP. ATA's work has been recognised with grant funding from Google and through the United Nations Association of Australia's World Environment Day Clean Energy Award.

### Travel in Timor Leste

Getting to Timor Leste is easy. Flights from Darwin take less than an hour, or you can fly via Bali or Singapore. Timor Leste is one of the least-visited countries in south-east Asia. It had fewer than 70,000 international visitors in 2017, with a majority of those being NGO and business-related. Consequently, the country has very little tourist infrastructure, a good thing for those who like a culturally more authentic travel experience. The country is generally safe for travellers and is overwhelmingly friendly.

Travel in Timor Leste on the country's dusty and bumpy roads and byways in the dry season is not for the faint-hearted; a 4WD is obligatory, and driver and guides are strongly advised. Many of the major roads are very rough, with motorbikes, children, cattle, goats, chooks and the occasional roaming horse just some of the obstacles. Safe road speeds are generally below 40km/h, although much of the traffic travels much, much faster. The views while travelling of the local scenery are amazing. Travel in the wet season is a whole different matter, and not advised, with many roads impassable due to the terrain and torrential monsoonal downpours.

Timor Leste is also a diver's paradise—the

seas around Timor Leste are in the migration paths of many different whales.

### Our tour

Our nine-day Light Up Maucatar tour took us in a 500 km loop south-west from Dili. Sights included the Santa Cruz cemetery (Dili), the national resistance museum (Dili), Balibo house and fort, the misty hills of mountainside Maubisse and a visit to a coffee plantation at Wild Timor Coffee in Aileu.

Along the way we stayed in basic guesthouse and dormitory accommodation, eating fine food with the locals, patting their dogs and trying to strike up conversations with often-shy local kids. We laughed a lot at each other, saw first-world road and airport infrastructure being constructed next to poor villages, heard the beautiful voices and guitars of numerous kids, listened intently to freedom fighters tell us of their friends lost, visited schools, drank too many gin and tonics, and rested on beaches. At all times I

### Ways you can help Timor Leste

- Join a local 'friends of' group. Google Friends of Timor for more information.
- Join ATA's International Projects Group: [www.ata.org.au/ipg](http://www.ata.org.au/ipg)
- Buy Timor coffee at [friendsofsame.org](http://friendsofsame.org)
- Donate to ATA's Gift of Light program at [shop.ata.org.au](http://shop.ata.org.au)
- Visit Timor Leste: Timor Adventures has a 'Light Up' tour in September 2018, or relax on the beaches on the diver's paradise of Atauro Island.



felt safe thanks to our Timor Adventures guides, Charles and Vincente. Both are fonts of knowledge, and Charles has a delightful sense of humour.

For me our three-day stay at the Sisters of Mercy clinic at Maucatar was the highlight of the tour, from a traditional dancing welcome through to the installation of the solar system and the water tanks, and a farewell performance. We worked, played, danced and ate with the locals, leaving a legacy that will ensure that no babies are born at the clinic in darkness or without cooling fans, and that the clinic fridge can keep temperature-sensitive vaccines secure. \*

Richard Johnston has a keen interest in Timor Leste and is a member of ATA's International Projects Group. Find out about the next Timor Adventures tour, coming up in September, at [www.timoradventures.com.au](http://www.timoradventures.com.au).



#### The Maucatar clinic PV system

The ATA's IPG designed the backup power system for the Maucatar health clinic to support critical equipment including lighting, ventilation fans, vaccination refrigeration and computer equipment during frequent extended grid outages. A 240 Ah 24 V deep-cycle battery bank charges when the grid is available using a Victron Blue Power microprocessor-controlled adaptive 12 A battery charger, which optimises charging relative to the way the battery is being used. Four 270 W solar panels provide a secondary charging source. The solar array has the ability to provide 100% of the average daily consumption based on five peak sun hours per day, charging the battery bank via a CINCO 40 A charge controller. The battery bank provides a one to two day buffer for lower solar production during cloudy weather and for intermittent use during night-time emergencies. The inverter is a Latronics LS series unit.



↑ The leaving ceremony included three hours of traditional farewell performances.

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