

## The East Timor Roofing Project

A joint project of the Rotary Clubs of Doncaster, Melbourne and Lilydale, Districts 9810 and 9800.

“When subsistence farmers were given a grain silo, they could feed their families and have a surplus to sell. This would give some of them money for the first time in their life.” Dr Frank Evans

*What started as just another Rotary project in the year 2000 to manufacture and install corrugated roofs for homes after the Indonesians retreated from East Timor, has become an amazing success story. The East Timor Roofing Project has raised enough money to build roofs on many schools, orphanages, community and commercial buildings and homes for East Timorese, over 2,000 water tanks and in excess of 1,000 grain silos, provide training for local East Timorese trainers, who themselves have trained over 250 East Timorese in building and administration skills. Over 12,500 tonnes of steel has been used to make the roofing and associated products. Equally amazing, the committee has been working methodically for over ten years to ensure the project was viable and to change direction when required to meet the needs of the local people. This story attempts to capture some of the lessons learnt by this committed band of Rotary volunteers, the manager and workers in East Timor.*

(Story told by Dr Frank Evans to Pat Armstrong, both of the Rotary Club of Doncaster)



Figure 1. Location of East Timor (Source: US Department of State, <http://www.state.gov/p/eap/ci/tt/>)

### How it Began

The idea of the East Timor Roofing Project (ETRP) started with General Peter Cosgrove from the Australian Peacekeepers, after Indonesian forces left East Timor. This departure followed the UN sanctioned referendum of 1999, which gave

### Facts about East Timor

- Also known as Timor-Leste
- Made up of part of the island of Timor, plus several other small islands
- Situated 640 km northwest of Darwin
- Population is 1,066,582 (2010)
- Literacy rate is 50% (2010)
- Life expectancy (2010) is 62 years
- Child mortality rate (2010; under 5)-is 64/1,000
- (In Australia, life expectancy is 79.3 years for males and 83.9 years for females. Infant mortality rate is 4.7/1,000.)
- In 2011-2012, the Australian Government provided \$123.7 million in funding to East Timor.
- Formed an independent republic on 20 May, 2002, with Mari Alkatari as Prime Minister and Xanana Gusmao as President. Jose Ramos-Horta became Prime Minister in 2006.

Sources: US Department. of State, Australian Government. AusAid, Wikipedia

overwhelming support for independence. However, it came at a huge cost. According to the USA Department of State, “Timorese militias organized and supported by the Indonesian military (TNI) commenced a large scale, scorched earth campaign of retribution. The majority of the country’s infrastructure including homes, irrigation systems, water supplies, schools and nearly 100% of the country’s electrical grid were destroyed.”<sup>1</sup> Many East Timorese were killed and over 300,000 forcibly relocated to West Timor.

After all this destruction and violence, General Cosgrove realised that there would be problems in finding meaningful employment for the East Timorese resistance fighters. He recognised that these fighters would need vocational training, the economy would need a “kick-start” and the people would need help after “living in cardboard boxes”.

Major Jim Truscott and Bruce Parker, who was also a Past President of the Rotary Club of Doncaster (RCD) and of the Australian Commando Association-Vic, came up with an idea that would address all these issues – to set up a corrugated iron factory to manufacture steel roofing. General Cosgrove eagerly supported the idea. Bruce, in turn, mentioned the idea to Dr Frank Evans, President of the RCD at that time, who put a proposal to the Board of his club to start a rolling mill. The proposal was accepted, with the expectation that this was going to be an 18 months project. The plan was to set up a mill and train East Timorese to manage the project, but they found that the East Timorese people were not yet ready to take over the management of the mill. Over 12 years later, Rotary is still actively involved with this project.

This story explains how it all came about, what worked and what didn’t, what they have achieved and the critical success factors. It is hoped that other groups who are embarking on similar projects can learn from this amazing story.

## Setting up the Mills

In July 2000, Ern Dawes, also a member of the RCD, went to East Timor to look for a site to set up the mill, but experienced some problems with the Portuguese expatriates, as the Indonesians had destroyed many of the records, including land titles. The club was eventually given a site by the government, about the size of a large house block, plus a second block opposite of about five acres.

The project received welcome publicity from District Governor Ian Riseley at the Rotary District 9810 Conference in Canberra in 2000. The club followed up this conference with a mail-out to the president of each Rotary club in the District. The timing for this project was good, as there was a lot of interest in East Timor and empathy for the East Timorese from Australians. (An estimated 40,000 East Timorese were killed by the Japanese as reprisal for their support of Australian commandos during WW11.)<sup>2</sup>

Hilton Dupen, a club contact in Sydney, located a second-hand rolling machine for \$73,000, plus other costs. RCD paid for about half this cost and received a “helping” grant from the Rotary

---

<sup>1</sup> USA Department of State, Background Note Timor-Leste, retrieved from <http://www.state.gov/r/pa/ei/bgn/35878.htm>. Accessed March, 2012.

<sup>2</sup>A number of incidents had added to this empathy for the East Timorese, in particular the Balibo shooting of the Australian, New Zealand and British film crew in 1975 and the Dili massacre of Timorese in 1991. It has been estimated that up to 200,000 Timorese lost their lives during the Indonesian occupation.

Foundation for AUD\$26,000, plus a total of about \$20,000 from a number of clubs in the District. The total amount raised for the mill was AUD\$85,000.

The mill was transported to East Timor with help from the Australian Defence Forces (through Bruce Parker and General Cosgrove). In December 2000, a small group, made up of Hilton Dupen from Sydney, Ern Dawes and John Turner (electrician), both from the Rotary Club of Doncaster, went to East Timor to install the machine and get it running. They built walls for the factory, but security was still a problem. Fencing came later. When they left, they installed East Timorese as caretakers.

There were some buildings on the blocks, but the timber available for purlins and rafters was useless, being green and termite ridden. Therefore, they needed a second machine, called a purlin machine to produce C or U shaped sections to build steel trusses for re-roofing the existing buildings on the blocks and for other houses for the local East Timorese. (A purlin machine folds a long length of steel into channels in C or U sections – these are used to make frames for the roofs of the houses.) A further \$60,000 was required to purchase the purlin mill, but funds from RCD had reached their limit, so the Rotary Club of Melbourne, which already had its own East Timor Committee, was invited to join the project and contribute the required funds. They accepted enthusiastically and two or three of its members have been an integral part of the management committee ever since.



The purlin mill in operation

In early 2001, a group of volunteers went over to East Timor to operate the two machines, producing roofing materials and teaching the locals to use it to build roofs. They managed to obtain job lots of galvanised steel coils for this roofing. The group then applied to an international organisation, which was helping with the resettlement of the East Timorese after the retreat of the Indonesians, for financial assistance. It was indicated that money for wages for workers and raw materials would become available, but this didn't eventuate.

At the time, the group was still receiving donations from other Rotary clubs and these helped to pay for some of the expenses. They then had their first major breakthrough; receiving a donation from Aus-AID of \$20,000 for steel (flat, galvanised sheet in 2-5 tonne coils). Later, Shell (Aust) gave another \$20,000 for steel. They were also receiving many donations of equipment, including a gantry and a hoist to lift the steel rolls, a roller door, and a 60 KVA Cummings diesel generator (as the machines needed three phase power).



Roof trusses on houses

In the early stages of production, all the roofing produced was funded by Rotary Clubs throughout Australia and donated to the East Timorese people for individual projects (houses and public buildings, e.g. orphanages, clinics, etc.).

## Installing a Manager

Initially, a number of people volunteered to go to East Timor as temporary managers, many going for short periods for building and training. At the end of 2001, the group advertised through the ABC's *Australia All Over* program for volunteers. One of the people who volunteered was Norman Bruce, who found the job so suitable that he stayed on and is still there. Norm had previously worked on his own as a building contractor in the Kimberley in Western Australia and was sympathetic and empathetic to the East Timorese. Norm's job was to manage the mill and train the staff. He adapted the existing primitive accommodation for himself at the factory, slowly improving the conditions, so that he now has running water, sewerage and reasonable accommodation. It is clearly a job for love, not material gain, as he received a living allowance of about \$1,000 a month from Australian Volunteers International (AVI), gradually increasing when the project became financially viable.

Norm has developed a loyal workforce of about 20 full-time people, with 18 men working the mill, two women doing the books and casuals as needed. He and his workers have used well over 12,500 tonnes of steel to make roofing and associated products.

## Expanding the Project

In 2002, ETRP realised that a lot of the water running off house roofs could be captured in tanks and used as drinking water. However, the East Timorese who were suspicious (and rightly so) of still water, took a long while to accept tank water as a safe option for drinking water. In that year, Norm and his workers used the rolling mills and a donated tank curving machine to commence the manufacture of water tanks. Since 2002, they have manufactured and installed over 2,000 water tanks.

In the same year, they applied for and received a grant from the Shell Sustainable Communities Foundation (UK) for AUD\$344,645 that would take them in a different direction - training local people. This was all the more remarkable, as ETRP was one of only seven successful applicants out of a total of 250. The grant was used to bring four East Timorese people for 'teaching' training at the Box Hill TAFE. It covered transport, fees, accommodation in Melbourne and their ongoing salaries in East Timor for three years. Among the trainees were three male engineering graduates, and one female to gain experience in office work and administration. At Box Hill, they all completed a three-month course in training.

In 2004, ETRP received a government contract to supply school roofing.

In 2005, John Shearer (from RCD) spoke at the Rotary Club of Adelaide, which subsequently donated \$32,000 to construct a training centre on the second block of land at Baucau. As result, when the three East Timorese men returned to East Timor after their training, they were able to use the new



The training centre under construction

building to start a basic building skills training course, working as the Baucau Campus of the Dili Institute of Technology. The government nominated trainees to attend the training centre, with graduates receiving a Certificate 4 in building trades training. It is estimated that between 2005 and 2010, the teachers trained approximately 250 students. Training resumed in 2012, but at a slower



rate. A group called Info-Timor set up an IT training course in the centre in 2006 and it is still well attended. Later, two new store rooms were constructed by working parties from RC Melbourne.

New opportunities then arose. In 2005, the Rotary Club Melbourne signed a memorandum of understanding with Opportunity International (OI) to establish a micro-finance operation with funds (\$130,600) provided by the club and The Rotary Foundation. ETRP built premises for the micro-finance operation on their large block. In the 2006 unrest in East Timor, the Dili headquarters of OI were looted and burnt, the staff left the country and operations ceased. A replacement operator was located in 2008 and Tuba Rei Metan, an organization developed and managed by East Timorese, reopened the facility on the ETRP block in Baucau. They continue to run a very successful operation that lends only to women, ensuring that more benefits will flow on to families.

In 2011, ETRP tendered for and won a contract with the Dutch humanitarian organisation, Hivos, to build 630 silos for grain – maize, sorghum and rice and to distribute these silos free of charge to farmers. Half of East Timorese are subsistence farmers, storing grain in canvas bags that are suspended from the roof of their homes. Regrettably, these bags of grain are prone to attack from rats and weevils and one third to half of the annual crop of grain is lost to vermin. This loss has contributed to malnutrition among many East Timorese children. An organisation called "Seeds of Life" has recently bought around 70-80 of larger silos for use in storing grain prior to planting the 2012 crops.



Grain silos and workers with a maize harvest

East Timor is predominantly limestone, which being porous, can hold a great quantity of artesian water. In 2011, the Rotary Clubs of Doncaster and Lilydale proposed to purchase a water drilling rig. ETRP supplied funding for the purchase and, with Rotary club donations and contract work, it is hoped to provide water for personal use and possibly agriculture for remote communities. Water was struck at 27 metres at the training site and found to be potable (drinkable), with no arsenic or organic contaminants.

### Forming a Committee

The first management committee was made up of then District Governor 9810 Ian Riseley, members from the Rotary Club of Doncaster, plus two members from the Rotary Club of Melbourne. The committee members from the Rotary Club of Doncaster were Past Presidents (PP) Frank Evans (Chair), Ern Dawes, Bruce Parker, John Turner, Terry Breasley (the first Treasurer) and Robert Nielson. PP John Shearer joined the committee about 2004, while Brett Stevens joined more recently. Many other Rotarians lent a hand.

In late 2000, almost from the outset, PP Bob Glindemann and Peter Manger from the Rotary Club of Melbourne joined the committee. In 2002, Richard Fowler, from the Rotary Club of Melbourne, took over as Treasurer. Since its formation, the committee has met, on average, once a month.

From early 2001, the Rotary Club of Lilydale was involved in many of the steps along the way, sending several volunteers to complete skilled work when necessary. Among these was Tim Hewitt,

whose son and son-in-law were the first volunteers to go to East Timor to build roofs. He joined the committee and has remained an active member since. Later in 2001, Tim, with another Lilydale Rotarian, Robin Johnston, drove an eight tonne truck, fully loaded with vital equipment from Melbourne to Darwin, then from Dili to Baucau. It was Tim's plea for assistance on the ABC radio program, 'Australia All Over' that attracted Norm Bruce's interest.

ETRP, which started as a Rotary Australia World Community Service (RAWCS) project, worked on a low-budget, but in 2005 it gained a government contract for schools to produce trusses. With increasing government and local commercial work, it became a financially viable business and later decided to register as a company, East Timor Roofing and Training Unipessoal Lda., in East Timor. A holding company in Australia, East Timor Roofing Holding Company Ltd was formed with three shareholders:

- Rotary Club of Doncaster (45%)
- Rotary Club of Melbourne (45%).
- Rotary Club of Lilydale (10%)

Between 2005 and 2011, ETRP consolidated the business and accumulated a surplus through contracts and other commercial work. However, as required by the company's constitution, any surplus funds must be used for the benefit of the East Timor people.

## The Benefits

The project has delivered many benefits across educational, health, social and personal spheres.

### 1. Educational

- The project has helped improve conditions within many of the schools. Before the project, school roofs often leaked, wetting books and the children. With roofs that don't leak, the learning conditions for the children have improved.
- It has roofed several kindergartens, schools, orphanages, clinics, widow's houses and public buildings (and is in discussion to get a contract for a further 50 kindergartens).
- It has provided about 20 scholarships for secondary school students to attend the teachers' college in Baucau and for some tertiary students to complete their university degrees.
- There have been over 250 graduates in Basic Building Techniques from the training centre. This course has been certified by technical teachers in Victoria (Northern Metropolitan Institute of TAFE). One teacher from NMIT volunteered to go to East Timor for two weeks to set up this certification.
- The factory provides work experience for a number of students from the local higher technical school.



A 27,000 litre tank for the island of Ata Uro, the largest made by ETRP

## 2. Health

- ETRP has provided roofs for clinics and health centres, improving the quality of the living and working conditions in these buildings.
- It has provided water through water tanks for toilet systems, improving sanitation.
- The water tanks themselves provide better quality water.
- Because of the introduction of the grain silos, more East Timorese people will now have food all year-round. This will help reduce grain loss and improve nutrition.
- The drilling program and pumps will provide a regular, clean supply of water for many families.
- Through its products, ETRP is helping to reduce malnutrition and improve water quality and sanitation. As shown in the table below, compared to Australia, East Timor has a very high infant mortality rate and low life expectancy at birth<sup>3</sup>.

Many East Timorese people believe that still water is bad, while running is good. East Timorese people living in Melbourne and Darwin helped persuade the local East Timorese people that water from a water tank, although still, is safe to drink.

	Infant mortality rate – deaths/1,000 live births (comparison to the world)	Life expectancy at birth (comparison to the world)
East Timor	38.01 (66)	67.95 years (155)
Australia	4.61 (190)	81.81 years (9)

## 3. Social

ETRP has provided:

- materials for the community centre at the Balibo house
- water tanks for refugees in 2006 when there was some civic trouble
- rooms for orphanages
- roofs for houses of widows

They have also financed a number of local projects in Baucau:

- school
- convent
- volleyball court
- grandstand refurbishment at a sports pavilion in Baucau
- uniforms for soccer team
- generator for a furniture factory
- weekend art classes for local children at the factory



Baucau grandstand, re-roofed and refurbished by ETRP, on Independence Day celebrations.

Note: a few councils in Melbourne area have adopted East Timorese towns (e.g. Cities of Casey, Darebin and Yarra) and East Timorese living in these cities have asked ETRP to help with projects in East Timor.

<sup>3</sup> CIA FactBook website <https://www.cia.gov/library/publications/the-world-factbook/geos/tt.html> (Accessed Nov. 2011)

## 4. Personal

ETRP has provided:

- water tanks so that women and girls don't have to walk to rivers to collect water
- regular paid work for 20 workers at the factory, allowing them to feed their families (many workers have nine or more dependents)
- training for East Timorese in manufacture, basic building skills (over 250 students have completed the course), and IT. This has made them more employable.
- micro-credit bank loans to women only, enabling them to set up small businesses, ensuring far more benefits to family welfare.



Water girls: ETRP hope that tanks and drilling wells will allow girls like these time to attend school.

## What worked

Some of the things that worked were:

### 1. Committee

- having a diverse group of committed and innovative people on the committee, all used to running businesses
- an effective Rotarian administrator / treasurer
- developing goals
- building on the enthusiasm of the committee – they wanted the project to be a success
- running regular monthly meetings
- ensuring that everyone on the committee had a job to do
- promoting the project by speaking at other Rotary clubs and writing articles and newsletters (building on the sympathy and empathy for East Timorese in Australia)
- applying for grants (various people wrote different applications).
- ensuring that the project became financially independent by attending to problems in financing, marketing and manufacturing as systematically and as quickly as possible. (It should be mentioned that when the future of the project looked doubtful during the early stages, several individual Rotarians made financial contributions.)

### 2. Partnerships

- having many individuals and groups contribute to the project
- forming a relationship with the Prime Minister, President and First Lady of East Timor
- forming a partnership between the three clubs – this increased the resources enormously
- using partnerships with other Rotary



Putting our case with the then Prime Minister Ramos-Horta.



clubs and Districts from all over the country and private sources to get contracts for business (e.g., ETRP supplied material for one kindergarten in East Timor for a charitable group in NSW and is looking for a contract for a further fifty.)

- gaining advice from members of the three Rotary clubs involved (for example, about company registration, fire safety and trucks)
- joining a steel buying group, resulting in many purchasing advantages

### 3. Management

- having a dedicated manager at the site of project who sends regular reports to the committee

“Norm has been absolutely involved at the coalface.”  
Frank Evans

### 4. Versatility

- being able to adopt new initiatives in the face of competition (e.g. making water tanks and silos)
- being innovative (e.g., getting the second Purlin machine, developing a training centre)

## What didn't work

- In hindsight, siting the factory in Baucau, not the capital Dili, created difficulties with competition and transport. Baucau is only 120 km from Dili, but the road between the two towns is so poor, that travel can take 4½ hours each way. However, had the factory been built in Dili, it may have been destroyed during the 2006 civil disturbances in Dili. ETRP was also able to set up employment opportunities for Falantil<sup>4</sup> veterans in Baucau.
- There has been very little input from the East Timor government in the development of the building industry and training.
- It has been difficult to find local workers who were sufficiently skilled to take over some of the management responsibilities.
- While many of the Australian volunteers fitted in well at the factory, some did not, mainly because they lacked empathy with the local culture.

## Key learnings

The committee of the ETRP has learnt a great deal over the past decade. Some of the key learnings that could be applied to other projects are to:

### 1. Management and governance

- Decide on the best way of helping the community. keeping all the factors in mind

---

<sup>4</sup> Falantil were the resistance fighters in the bush, who defied the Indonesian Army, with civilian support for twenty five years. They were a branch of the Fretelin political party, which is still the largest party in East Timor. Their commander was Xanana Gusmao until he was captured, and then Taur Matan Ruak, who has just been elected as President of East Timor.

- Have a realistic timeframe, as projects will not happen overnight
- Ensure that the management committee has a broad range of skills
- Have someone competent on the ground to manage the project. This person needs a range of technical and interpersonal skills, shows empathy with the local population, and should be accustomed to working in isolation in remote locations.
- Set up a legal structure in the country in which the project is taking place. This helps to address potential risks – legal workers’ compensation (e.g. redundancy), workplace conditions – legal, physical, health, cultural.
- Find like-minded people who are interested in helping with the project
- If sending volunteers, make sure they are carefully selected. They then can become ambassadors to sell the project to other clubs.
- Look at new products to keep the project viable

“Once a local gang threatened to burn down the factory. One of the quick thinking workers at the factory told the men that there were explosives inside, which would demolish many houses and the gang left.” Frank Evans

## 2. Respecting cultural differences

- Be prepared to accommodate any cultural differences
- Consult with and build the trust of the local people and the workers, as this gives them ownership

## 3. Fundraising and communication

- When deciding to start raising funds, start with your own club, and then go to other clubs in the District
- Gain support from the Rotary District Governor
- In the early stages, provide regular updates to the District Governor for publishing in the District Governor's newsletter
- When ready, go National (e.g. write an article for Rotary Down Under)
- Communicate with other clubs – by writing to the President in each club in the District, giving presentations at Presidents’ meetings and the District Conference and seminars, and giving presentations at clubs
- Invite clubs to sponsor particular projects or parts of projects (not forgetting to send thank you letters)
- After speaking to a club, make a follow-up visit, acknowledging any assistance provided by that club since your first visit

### **Critical Success Factors**

The ten success factors were:

1. Getting support from the District Governor from the outset
2. Promoting the project to and obtaining support from other Rotary clubs (The ETRP committee members visited 11 clubs in the first year.)
3. Having a committee that was effective in planning (see Appendix 1. below) and keen to succeed, with members possessing a wide range of skills, including financial management
4. Sharing the work load on the committee and with other partners. Co-operation at all levels has been vital.
5. Applying for and obtaining grants outside the normal Rotary fundraising channels
6. Structuring the organisation so that any surplus funds were reinvested back into the project
7. Demonstrating cultural empathy with the local people
8. Developing a reputation as being financially viable, reliable, producing goods of high quality and on time, i.e. developing into a successful business, so that ultimately, donations were no longer needed
9. Being entrepreneurial and flexible
10. Having someone competent to manage the project in the country of operation

### **Plans for the future**

The Board of Directors of the ETRP wishes to create as much employment and humanitarian benefit as possible for the people of East Timor. This will involve continuing the manufacture of high quality roofing, tanks, silos and other goods, training East Timorese to higher levels of skills and management and, ultimately, handing over the project to a suitable East Timorese organisation.

### **Acknowledgements**

Over the course of this project, now running for 12 years, there have been so many helpful people involved that they cannot all be mentioned here. The Management Committee, subsequently the Board of Directors, Rotarians and others who were co-opted onto the committee have put in so many hours of unpaid work, it is impossible to overstate their value. Numerous members of the Rotary Clubs of Doncaster, Melbourne and Lilydale have helped with advice and donations of material, equipment, time and money. Rotary Clubs from every state in Australia have sponsored building projects or donated essential goods and money. Rotary District Governors from both 9800 and 9810 have always encouraged the project. Private businesses from most states have given generously. To mention just one, Cummins, Australia donated a large 60 KVA diesel generator. The Shell Sustainable Communities Foundation (UK) made it possible to go ahead with the training centre with a huge award.

The Rotary Foundation of Rotary International awarded us a helping grant at a crucial time. RAWCS and its DIK store have been very helpful in shipping goods to East Timor. The Aus-AID branch of the Department of Foreign Affairs and Trade granted us seeding capital to buy the initial stock of raw

material and Australian Volunteers International subsidized our manager for several years in the early stages. The Australian Defence Force was instrumental in transporting large machines and heavy loads over the difficult roads of East Timor on several occasions. The Government of East Timor has generously leased us the site for a very reasonable rent.

I thank everyone who has contributed to the success of the project and I apologise to all those I have not mentioned directly. Thank you all. (Dr Frank Evans)

## **APPENDIX 1.**

Suggested steps for setting up a new project:

1. Investigate the need for the project and whether it is acceptable in the recipient country
2. Prepare a plan. Funding, visits, equipment, material, availability
3. Select a suitable site and secure ownership, a lease, or long term rental of the property
4. Establish ownership of the project as a registered organization or company, which will also determine the level of liability you wish to hold
5. Find a suitable in-country manager who understands your methods
6. Select equipment, new or fully reconditioned second hand
7. Set up financial reporting
8. Establish costing for standard products, set minimum margins and selling prices, leaving the final market prices to the local manager.
9. Set up bank accounts in the country and in Australia, with two signatures to operate
10. Decide on marketing strategy and the method of selling the products
11. Establish guidelines for donations of benefits
12. Establish a long-term strategic plan (three years is probably as long as can be done accurately)
13. Arrange the best buying methods for raw materials, e.g. join a buying group
14. Set up shipping arrangements and procedures
15. Write a procedures manual for all involved
16. Arrange for monthly written reports from the manager to the Board and monthly financial reports
17. Ensure that all accounts are audited by a professional auditor