

Robin Rigby Trust Collaborative Coastal Research Final Report 2019

Traditional Conservation Practices in Three communities of Ataúro Island, Timor-Leste

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Partner Organizations: Manukoko Rek Women's Cooperative and the Community of Vila Maumeta



Report on field research conducted on Ataúro Island (Vila Maumeta, Beloi and Makili), Timor-Leste (April 9 to May 21, 2018, and March 2 to 30, 2019)

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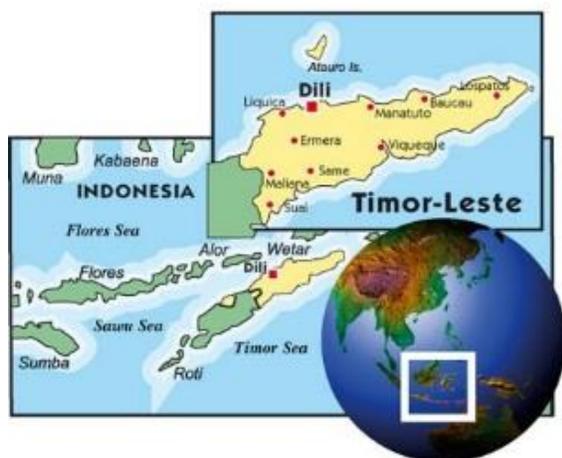
Acknowledgements

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I also would like to like to thank the communities of Vila Maumeta, Beloi and Makili, in special to the high school teacher Faustino Barros (Technical Vocational School of Ataúro) for his guidance around the community. I would also like to thank the interpreter Marcelo Belo, from the NGO Roman Luan for transporting me to communities and for Tetum-English translations of interviews.

Many thanks to the Fundação Oriente for providing me with amazing accommodation while I spent time in Dili, and in special to Graça Viegas, Sónia Fonseca and Clotilde Quintão for their kindness.

Introduction



This field research trip was conducted at Vila Maumeta, Beloi and Makili communities on Ataúro Island, Timor-Leste, is part of my PhD in Applied Science (Environmental Science) at Saint Mary's University, Halifax, Nova Scotia, Canada, entitled: "Coastal and Marine Conservation in Timor-Leste: Assessing the Contribution of Community Conservation Practices". *Tara bandu* is the customary law that manages the relationship between humans and between humans and the environment. Local communities apply Traditional Ecological Knowledge (TEK) through *tara bandu* rules to implement closures in fishing and hunting in certain areas for ceremonial and conservation purposes. *Tara bandu* is much more holistic than conservation, but my research focuses on the conservation aspects of *tara bandu*.

The purpose of this research is to analyze how community conservation practices, especially *tara bandu*, help to meet ecological and human community wellbeing goals in these three coastal communities. The outcomes will be assessed through the measurement of indicators of conservation, human community wellbeing and ecological wellbeing. The development of the

indicators will be based on the UN Sustainable Development Goals (SDGs) and its targets, SDG 2; SDG 3; SDG 14 and SDG 15.

- SDG 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- SDG 3: Ensure healthy lives and promote well-being for all at all ages
- SDG 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Tara bandu rules guide community members about any certain species, methods and equipment to be used in coastal and inland areas. The community sets rules such as partial (and sometimes permanent) fisheries closures in certain areas to protect marine species that the community relies on, such as coral fishes, corals, seagrass, turtles and other marine species to help to increase fish catch and consequently, food security in the community.

Tara bandu is recognized in Timor-Leste's constitution and integrated into forestry and watershed policy and strategy by Ministry of Agriculture and Fisheries (MAF) (Miyazawa, 2013, p. 16). The Timorese government has been closely working with district officers, community leaders and other groups to “preserve the environment and local livelihoods when they band together to protect local natural resources i.e. forest, lakes, rivers from destruction and pollution” by strengthening the practices of *tara bandu* in communities around the country (GoTL, 2012, p. 93).

Conservation Initiatives

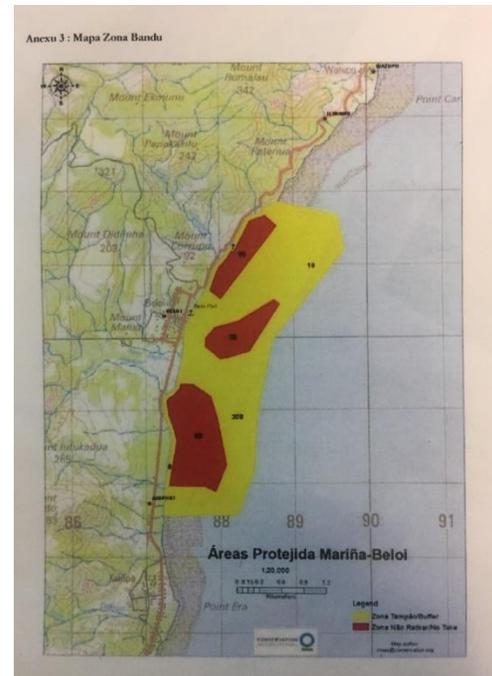
Conservation International helped local communities on Ataúro Island to implement Marine Protected Areas through the Island. The community (Suco) of Vila Maumeta implemented their *tara bandu* general regulation in September 2017. Local communities apply Traditional Ecological Knowledge (TEK) through *tara bandu* rules to implement closures in fishing and

hunting in certain areas for ceremonial and conservation purposes. This regulation was written by the General Directorate of Fisheries, Forests, Coffee and Industrial Plants, and the General Directorate of Environment, the Administrative Post Ataúro and Conservation International, and financial support from the Asian Development Bank.

The *tara bandu* regulations for Beloi and Vila Maumeta have been written on the rules to regulate the area of each suco (village) and the natural resources, whether terrestrial or marine, to guarantee natural resource sustainability for the new generations. The Protected Areas refer to marine and terrestrial regions that include the categories of biological criteria as places where there are flora and fauna and based on the formal law of protection. There are monetary penalties for people who harvest from the protected areas and the Suco Council applies prohibitions and recommends penalties when necessary, and contacts the Police for more serious matters involving violence.

Vila Maumeta has a Marine Protected Area (MPA), while Beloi has a Locally Managed Marine Area. In the Pacific region, the term 'Locally Managed Marine Area' (LMMA) is referred when marine resources are at least partially managed by communities' (Rocliffe et al, 2014, p. 2). Locally managed marine areas involve co-management arrangements between coastal communities and other stakeholders such as government, NGOs, universities and the private sector. The local NGO Roman Luan supported the community of Vila Maumeta, together with community members, the NGO Conservation International, and the Timorese government set up the MPA. The NGOs Conservation International, WorldFish and Blue Ventures, and Barry's Place Eco-Lodge (Barry and Lina Hilton) have supported locally-led conservation initiatives in the Suco Beloi and Ataúro Island in general.

Maps of Vila Maumeta Marine Protected Area and Beloi Locally-Managed Marine Area (below)



The purpose of these protected areas is to protect the biodiversity area and also to increase the food security and nutrition of the community through the increase of fish in the corals and seagrass inside and outside of the MPA.



Fishers in Vila Maumeta (March 2019)

General chronology of the data acquisition and Methodology

The methodology adopted included participant observation, informal conversations, video interviews and voice recorded semi-structured interviews with the help of an interpreter, Marcelo Belo (Tetum-English). I performed some interviews in Portuguese (my first language). Overwhelmingly amount of information was obtained with informal conversations during the period between April 11 and May 17, 2018, and March 1 to March 28, 2019.

The questionnaire contains 29 questions about species of fish harvested, hunting, Marine Protected Area (MPA), Locally Managed Marine Area (LMMA), including the extent of community involvement in co-management of Protected Areas (Pas), including terrestrial. I also included the perceptions from people of the importance of using *tara bandu* rules for the protected areas. I interviewed 31 people, fishers and farmers, men and women. In addition, we had meeting in Makili to map the resources and *tara bandu* in different villages, with 26 people present, with 20 men and 6 women. Another meeting was held with the *Tara Bandu* Committee in Vila Maumeta to discuss about collecting the *tara bandu* fee from tourists visiting the coral reefs of the community. Twenty people were present, 3 women and 17 men. The total number of research participants are 77 people, including interviews, meeting and focus group.

Problems Encountered on Field Trip

The official languages in Timor-Leste are Portuguese (my first language) and Tetum. Portuguese is not widely spoken in in Timor-Leste, which limited communication with many community members. Tetum is a Malayo-Polynesian language which is influenced by Portuguese. Indonesian

and English are considered working languages. On Ataúro Island, Tetum is widely spoken, although there are other local languages.

As a researcher, often I had to assert myself in several situations due to the fact that I'm a woman. I had to assert myself in a way that Robin Rigby Trust funding would help the whole community while dealing from pressure to help other groups who also need funding for their projects.

Successes Achieved

The community of Beloi has a system in place to collect \$2 from each tourist who goes snorkeling and/or diving in the *tara bandu* Locally Managed Marine Area. Barry and Lina Hinton own the Eco-resort Barry's Place in Beloi. Barry's place organizes activities for tourists, including snorkelling gear rental to visit the *tara bandu* protected areas (LMMAs).

I joined a snorkeling group of 7 people, mostly from Japan and Europe. We (each) paid for the boat trip, and \$2 *tara bandu* fee. Barry's Place receives the \$2 from each tourist and sends the money to the Beloi *Tara Bandu* Committee. The Committee is saving the funds (*tara bandu*), and plans to invite the community to make a decision on how to use the money to improve the community, such as ameliorate the water supply for the community.

I shared my snorkeling experience from Barry's Place in Beloi with the Vila Maumeta *Tara Bandu* Committee during a meeting held on May 8, 2018 at the Xefe de Suco's office. I had the kind support of Domingos Noronha, leader of the *tara bandu* group, and Faustino Barros (high school teacher) with Tetum-Portuguese translations during the meeting with the Xefe de Suco, Filipe

Ximenes and the Vila Maumeta *Tara Bandu* Committee. Upon returning to the community in March 2019, I've learned that the women's cooperative and restaurant Manukoko Rek has been working together with the tara bandu committee to collect \$2.00 from each tourist who visits the Vila Maumeta MPA.



Donating buoys to the *Tara Bandu* Committee of Vila Maumeta and snorkeling gear to the Manukoko Rek Women's Cooperative



Transporting sewing machines for the Waste Management Group (also a women's group)



With Xefe de Suco (Community Leader) of Vila Maumeta and the Waste Management Group



Women make purses, bags and other materials from recycled garbage materials. Local hotels buy the recycled bags for snorkeling trips, and fishers also use these materials.

The community leader of Vila Maumeta, Xefe de suco Filipe Ximenes, emphasized the activities of the Women's group who make crafts and sell them from waste materials. The group is called 'Waste Management' (Jestaun Lixu in Tetum). With the Robin Rigby Trust funding, the group received three sewing machines and sewing materials. In addition, the diving store Torpedo Rays (Halifax) sold 10 diving masks and snorkels at cost (2018), and Ahmed Abdel-Hamied (Canada Games Centre Aquatics Program Coordinator) kindly donated 40 used swimming goggles and masks from the Centre's lost and found to Timorese fishers and their families.



Vila Maumeta's coral reefs

What I have learned from the Field Trip

I have learned how capacity building is important to help organize communities. Also how conservation initiatives came from communities as a way to fight top-down development projects in the Island (Ataúro). Communities on Ataúro Island organized themselves with local and international NGOs against large-scale government projects including helipads and large hotels, which would compromise the eco-tourism model that communities support. Communities support the implementation of protected areas (terrestrial and marine) because if the Island were not protected, large tourism developers would employ their own people and keep locals out of work. For example, some local community members run homestays to receive tourists. In addition, ecotourism helps to keep local culture by allowing Ataúro residents to be employed in their own communities.

The community of Beloi is thriving in terms of tourism and conservation because of access to capacity building. For example, the community of Adara, which is part of Suco Beloi, successfully manages its own Locally Managed Marine Area (LMMA) with previous help from WorldFish. The NGO Blue Ventures collects data on the coral reefs in the Beloi LMMA to help the community with conservation projects.

The community of Makili is not ready to implement a Marine Protected area through *tara bandu* rules because the community has a small fishing area and a lot of fishers. Many community members apply traditional *tara bandu* rules in their farming areas to deter other people to steal their crops. They hung *tara bandu* items on the property as people won't steal believing they will

be cursed (sickness, etc.). The community applies tara bandu rules to protect their water sources and local forests.



Future Academic Plans

The main implication of the results of my PhD research is for user participation in fisheries and coastal management. It aims for evidence-based, informed policy development through research outcomes. The end users of the outcomes of my research are the Timorese government, international NGOs and coastal communities in Timor-Leste that work with conservation, such as Conservation International. This research can help the Timorese government (Ministry of Agriculture and Fisheries) to have much needed data on the indicators of human and ecosystem wellbeing as a result of community-based conservation practices, especially *tara bandu*. In addition, the outcomes will help the government to design policies that include traditional practices in ecotourism and fisheries development for communities' sustainable livelihoods.

Conclusions

Fishing and farming are important to support the livelihoods of people living in the communities of Ataúro Island. The communities of Vila Maumeta, Beloi and Makili were chosen as case studies because artisanal fisheries and farming are essential for these fishers' livelihoods. Small-scale fisheries are a considerable source of protein and livelihoods around the world, and very much so in these communities. In addition, farming is relevant because all fishers are farmers, but not all farmers are fishers in these communities.

Some expected outcomes of adopting *tara bandu* conservation practices are:

- Improving natural resource management by including communities members in the decision-making process
- Making coastal resource management more affordable and culturally sensitive by engaging community in natural resource practices

More capacity building is necessary to improve local governance through support from state, NGO and private institutions to fully implement income collection from the protected areas. For example, the community of Beloi has more NGOs and other actors, such as Blue Ventures, Barry's Place and others who help the community with capacity building and collection of *tara bandu* fees from tourists who visit the reefs under *tara bandu* rules (LMMA).

When communities are the main actors in natural resource management, it is their best interest to preserve nature as they rely on it for their subsistence. When NGOs, governments and other international bodies understand the historical context of conservation practices done by

communities, and genuinely consider the needs of engaging these communities in bottom-up participatory projects where community management is the key for fisheries conservation, then the goals of conservation efforts will be met. There will be fewer conflicts between them, and real progress will take place in fisheries conservation. Gender and ethnic awareness will promote a more equitable use of natural resources within the community, and thereby, improving community-based conservation programs.



Preparing *tara bandu* ceremony at Suco Dato, Liquiçá Municipality. I was invited by the Xefe de Suco Oscar da Silva to attend the ceremony held on April 13 and 14, 2018.

Photos from the 'Aktividade Suco Vila Maumeta' Facebook page, taken by the Vila Maumeta's community leader Filipe Andreas Excapenaques Ximenes.



Youth planning trees on the hills of Vila Maumeta



Waste management group building water collection places and raising awareness about properly disposing garbage in the community.



Water conservation project in Vila Maumeta through planting trees on the hills near the water source



Water conservation project in Vila Maumeta. Volunteers, including young people, help to conserve water by planting trees on the hills.

Research Photos (2018 and 2019)



Corals in the Beloi Locally Managed Marine Area



Traditional bamboo fishing trap in Makili and young man in the Vila Maumeta coral reef

Expenses: April 9 to May 21, 2018

List of Expenses

Cintia's Expenses		USD (Timor-Leste Currency)	CAD
Accommodation	Manukoko Rek Guesthouse (Vila Maumeta)	383.00	496.64
Plane tickets	Return Airfare (Halifax to Bali* and Bali to Dili)		1,637.93
Transportation	Return boat trips from Dili to Atauro Island	\$28.00	36.31
Transportation	Taxis		76.30
Transportation	3 boat trips from Makili to Vila Maumeta	20.00	25.93
Food	Per diem (40 days)		800.00
Food for Focus Group in Makili and <i>Tara Bandu</i> meeting in Vila Maumeta	Local, traditional foods such as seaweed, fish, etc.	90.00	116.703
Translation Services		225.00	291.76
Snorkeling gear for Manukoko Women's Cooperative	Baskets, snorkels, diving masks, flippers		690.31
Buoys	For Group <i>Tara Bandu</i> to demarcate MPA	105.00	136.15
Gasoline and diesel	For motorcycle and boat	57.25	74.24
Office supplies	(Notebook, printing, USBs, etc.)	70.75	91.74
Other transportation and accommodation			169.41
Total expenses			4,643.42

*The Bali airport is known as the place to connect international travellers to small Indonesian islands and Timor-Leste.

Expenses: February 28 to May 31, 2019

List of Expenses

Cintia's Expenses		USD (Timor-Leste Currency)	CAD
Accommodation	Manukoko Rek Guesthouse (Vila Maumeta)	125.00	166.78
Plane tickets	Return Airfare (Halifax to Bali* and Bali to Dili)		943.46
Plane tickets	Airfare (Bali to Dili and Dili to Kupang)		583.59
Transportation	Return boat trips from Dili to Ataúro Island and local transportation (taxi, tuk tuk, etc.)	\$47.00	62.71
Visa on arrival fee		30.00	40.03
Donation	Book: Financial Management for the Hospitality Industry		124.28
Food	Per diem (32 days)		800.00
	Internet plan (March) for a research assistant and I	69.50	92.73
	Miscellaneous dinners, food, cell phone credits for research participants who helped with my research	104.26	139.10
	Research Fee - Ministry of Agriculture and Fisheries	275.00	366.91
	Sewing Machines for Garbage Project - Vila Maumeta	525.00	700.46
	Iron for Garbage Project - Vila Maumeta	13.50	18.31
	Zipers, and other materials for Garbage Project in Vila Maumeta	40.50	54.04
Total			4,092.40

*SMU VPAR covered the extra \$1,000 for the Halifax-Bali airplane ticket.

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