

## **Chapter Seven: Independence and the (re)negotiation of customary relations<sup>1</sup>**

Like the rest of post-independence Timor Leste the specter and expectation of development looms large in Baucau, the municipal hub of the east and the nation's second largest city<sup>2</sup>. Yet in this "in desperate need of development" economy, less discernable to the unacquainted is the fact that the customary processes of exchange and inclusive sociality tracked in the pages of this book are equally enmeshed in complicated relationships with the formal state and capitalist sector. In this chapter I explore the renaissance of custom in Baucau town and surrounds and its many challenges. I begin with a discussion of the issues which confronted customary water governance in the late twentieth century and then examine the independence era reassertion of ancestral identities and relationships. Through all of this I shed light on the multiple ways these worlds are being (re)negotiated 'cleaving' together and apart with powerfully discursive alternative practices and relational materialities (Lavau 2013). I also examine the ways in which the substantial resources invested to build community-based water supply systems and carry out hydrogeological research have to date elided substantive consideration of the complex socio-ecological variables impacting on the use and management of water resources in this particular karstic zone.

During my fieldwork for this book, the Timorese government (in association with USAID) was developing new land and property laws and trialing a process of land registration to further demarcate property and create secure land markets, particularly in urban areas (Rede ba Rai 2012, Fitzpatrick *et al* 2013). Another part of the bureaucracy was working with international advisors to draft new national water laws and policies (Jackson & Palmer 2012). This meant that as local peoples were embracing their freedom to reconstitute their ancestral traditions and invigorate relations among themselves, they were also drawn into processes which sought to define land and resources through new systems of abstraction, legibility and value. Despite the land registration trial being limited to urban Baucau, the consequence of this discursive intervention across the zone was that a new emergence was underway: '*agora rai folin iha*' (now the land has a price). The immediate effect of the new laws was to enhance the power of the state to 'purchase' long term leases or expropriate lands for development (Rede Ba Rai 2012; Stead

2014). Such a powerfully discursive set of practices overlaid existing relational processes with new tensions. In Baucau, the result has been disquiet, simmering anxiety, and even violence between local residents, neighbours and families. Sub-village heads say they are now called to intervene and mediate in an unprecedented number of local property disputes.

At the same time as new land titling processes are being trialed, made legible and passed into law, district administrators and their national level counterparts eagerly encourage and plan for development and international investment in the district. Village heads are asked to support particular development visions often prior to community ‘socialization’, and this inadequate ‘consultation’ leaves many villagers uninformed and embittered. District administrators meanwhile are hopeful that new national political administrative laws will drive a municipal makeover. Amidst this milieu of aspirational rhetoric and weak consultation, national and international aid agencies roll out a bewildering and repetitive suite of ‘global best practice’ development programs aimed at improving well-being, livelihood capacities and local governance (cf. Peake 2013; Shepherd 2013).

In all this planning for economic development, to deliver services, to build local capacity, to create jobs and well-being, the formal sector continually ignores or underestimates the extant capacities for active economic engagement, social and environmental governance which is manifest in the customary economy. While some customary practices may be recognized in rural development initiatives, this recognition is routinely dichotomized against urban enclaves such as Baucau which are imagined to harbour only remnant traditions (see ARD 2008; Costin & Powell 2006). Yet the discursive sidelining of the customary economy and attachments to place does not mean that they go away. As we saw in the previous chapter, customary understandings of exchange and ‘inclusive sociality’ are very much ongoing concerns in both rural and urban areas. To understand both the commitment to, and the halting re-emergence of, such ritual relationships in the independence era, below I examine the succession of late colonial ‘developments’ that have impacted on Baucau’s water supply and customary governance.

## Late colonial development in Baucau

As we have seen in previous chapters, in twentieth century Baucau the sacred house complexes clustered around the springs of Wai Lia were incrementally destroyed or moved elsewhere as the colonial presence in the town became entrenched. The rice fields in the immediate vicinity of the Wai Lia spring also slowly disappeared, replaced with government and church buildings, shops and roads. Yet in the late 1930s the ritual processes at Wai Lia spring were still vibrant events, comprising annual house-based rituals and the larger ‘one in seven year’ ceremonies involving villages from the wider region. Each dry season around August, ritual prayers and ceremonies would commence and continue for seven nights, feeding the spring’s custodial *dai* (manifest as large eels) and culminating in a celebration of song and dance involving groups of young men and women. After this the water would begin to flow. While Pinto Correia, the Administrator of Baucau in the 1930s, does not report specifically on these rituals, he does note that ‘[*I*]ulic are the springs of Cai-Bada, of Baucau, of Uai-Líli, of Loi Dua and of Uai-Cana [Venilale], *lulik* are all the streams, the trees that sink their roots into them, and the eels that live in them’ (1935: 63). He also notes that ‘[i]n the spring of Uai Tequi, of Bucoli...the custom persists to gift the eels who lives there, rice and grated coconut’ (1935: 63). He reports that once in Baucau ‘[w]hen a European sergeant accidentally killed a *lulic* eel that lived in a well near the water fountain [see Figure 5.3], a wave of terror spread among the *indígenas* (1935: 63-64). He noted that ‘[i]t is forbidden to drink palm wine [*tuaca*] at the spring of Baucau’ (1935: 67).

During World War II the town was occupied by the Japanese and bombed by the Allies. Much of the town’s population fled to the hills. When life returned to normal in the post war era, the suite of rituals connected to the Wai Lia spring decreased in frequency and magnitude due in part to a new colonial tax placed on the slaughter of animals (cf. McWilliam *et al* 2014). By the 1960s a municipal water pumping station had been constructed at the site forming the basis of the town’s piped water supply (see Figure 7.1). Meanwhile on the plateau, a Chinese-Timorese market gardener from Baucau town had ‘discovered’ the underground water source at Wai Lia Bere and had dynamited the cave in an unsuccessful attempt to extract water for agricultural development. This explosion destroyed the seven distinct channels of water flowing inside the cave. Around

the same time an international airport was constructed on the edge of the Baucau plateau (see Map 4.1)<sup>3</sup>.

In the late 1960s, an incident at a market day cockfight in Baucau town led to a violent altercation between people from the plateau and others from Baucau. Soon after this the waters at the Wai Lia spring ran dry. Angered by the lack of respect shown to the people from the plateau by the townsfolk, the plateau custodian of these waters had intervened (either physically<sup>4</sup> or spiritually) to shut off the town's water supply. Hearing this rumour, the town's colonial administrator was so incensed that he sent an armed convoy of cars to arrest those responsible. A group of men from the hamlet of Buburaga were arrested and detained in the Baucau police station. The administrator stated that they would not be released until the water flowed again. Eventually the plateau custodian of these waters descended and convinced the administrator that as he was not God, he was not in control of the water supply and the prisoners should be let go.

By the late twentieth century the water supply at Wai Lia was intermittent at best. The Indonesian occupation had also severely disrupted the conduct of ceremonies at Wai Lia. Due to the ongoing armed conflict, the majority of people from remote villages were now resettled in Baucau's 'new town' area (Budiardjo & Liem 1984: 81). This burgeoning 'new town', an Indonesian administrative centre, was on the plateau edge above the Wai Lia spring. This growing city desperately needed more water. In order to facilitate this, in the 1980s the Indonesians tried to construct a large-scale water extraction facility at Wai Lia Bere on the plateau. This triggered a large explosion and the project was abandoned.

Armed conflict, death, the widespread burning of sacred houses, forced relocations and highly restricted population movements meant that relations between houses and communities across the region were now severely disrupted (cf. McWilliam & Traube 2011). In addition while many of the local ritual governance traditions were familiar to the Indonesian occupiers (shared as they are with local populations across the archipelago), the privileging of the Indonesian state's own political and economic agenda, the destruction of many sacred houses and a ban by the military on large scale gatherings of Timorese for political reasons meant that customary rituals were

unable to be properly carried out. Fear and suspicion pervaded relationships at all levels. Yet as this repression eased in the mid 1990s, a young custodian of Wai Mata Buu (the custodial house of the Wai Lia spring) was able to reconnect with Ledatame Ikun, the older sibling house on the plateau. Once reunited Wai Mata Buu reconstructed his own sacred house in the hamlet of Macadai Wai Mata Buu some distance below Wai Lia in Baucau.

By the late 1990s the water at Wai Lia had dried up again completely. Panicked by the lack of water, in 1998 the town's administrators sought out the village heads and the custodians of the Wai Lia spring to seek a resolution. Eventually money and, more crucially, Indonesian military permission was given for the village heads and ritual leaders to organize a large 'one in seven year' ceremony at Wai Lia. The respective ritual leaders of the four villages of Bahu, Tirilolo, Caibada and Buruma were called together and an approach was made to Ledatame Ikun, the custodians of the water on the plateau. A small ceremony was held at Wai Lia Bere, and in August 1999 a large collective 'one in seven year' ceremony was carried out at Wai Lia. While following this ceremony the water flow returned to Wai Lia, initially it was not strong. This was attributed to the fact that the Indonesian authorities had insisted that the sacrificed buffalo was killed according to Islamic principles (strung up from a tree and slaughtered) rather than being slain directly into the spring water as was the custom<sup>5</sup>. It was not until the Indonesian occupiers finally exited Baucau in late September 1999 that the waters of Wai Lia really began to flow again<sup>6</sup>.

The exit of the Indonesians was not the end of the water governance troubles at Wai Lia. In September 1999 the village head and traditional political ruler of Bahu<sup>7</sup> also left Baucau. A long time collaborator with the Indonesians, he had feared for his life and fled across the border to West Timor where he remains. This, and other absences, added further challenges to the independence era governance of the spring. Another issue impacting in particular on the organization of large scale 'one in seven year' ceremonies (an ideal rather than actual period of time), is the fact that conducting these rituals takes an immense investment of time, community coordination, livestock and money.

In contrast to these larger scale community rituals, rituals linked to particular houses are a less problematic undertaking. In the early independence era many Baucau house communities began reconstructing or renovating their sacred houses (da Costa *et al* 2006; Loch 2007)<sup>8</sup>. This process continues and the resurgence and reconstitution of these material forms and practices is everywhere evident, reinvigorating as well house-based marriage alliances and their accompanying life cycle rituals. On the whole these house-based alliances are private matters and remain outside of the purview of formal state institutions and practices of governance<sup>9</sup>. Nonetheless ritual leaders do make a link between the vibrancy of these house communities and their potential to eventually reconstitute broader community rituals such as those held at Wai Lia.<sup>10</sup>

In the past large ritual gatherings at Wai Lia (and other springs) were overseen by local political leaders. Yet most large scale public ritual gatherings in Baucau today are devotional acts of procession, prayer and song connected to Catholicism (see Figure 7.2). One is now more likely to find political leaders in church reading psalms to their subjects during Sunday Mass, than overseeing rituals seeking agricultural fertility, community prosperity and harmony at springs<sup>11</sup>.

### **Catholic syncretism**

As in other places, across the region the Catholic Church has cultivated and inserted its own presence at spiritually potent sites, particularly mountain tops, caves and springs. While for local people there is no necessary disjunction between these largely animist and Catholic processes of worship and devotion, a seemingly syncretic relationship often belies a history of simmering unease, even hostility.<sup>12</sup> Intervening early on to groom the children of locally prominent houses for the priesthood, since the 1930s much of the land around the Wai Lia spring has belonged to the church. Over the years it has become the single biggest landowner in Baucau and at some level the town today continues to operate like a medieval bishopric. Its various businesses and entrepreneurial priests control and direct much of the formal economic activity in the town and play a critical role in maintaining civic functions and infrastructure in the post-independence era. It has now constructed a new teacher's college and Centre for Bakita (the Black Madonna) near

the site of the long since destroyed apical sacred house complex in the hamlet of Waukau. In 2012 when another of the most important houses connected to the Wai Lia spring complex was being renovated, a controversial decision was taken by some family members to move it from its location and rebuild it closer to a nearby Catholic grotto. An elder of the house, a now retired Catholic priest, explained to me that the rebuilt house was now an *oma lisan* (M: a house of tradition) and no longer an *oma lakasoru* (M: a ritually powerful sacred house). The house he said was now *mamuk* or spiritually empty. This was not the view held by all members of the house and the renovation was a source of much inter-familial tension.

Tensions between Catholic and animist traditions was also evident in another happening at the spring of Wai Lia in 2010. At the time, sporadic neighbourhood violence and fighting between 'local' and 'in-migrated' youth in the centre of the old town was taking place in the marketplace near Wai Lia. Along with the frequent fights occurring in its vicinity, the area's neglected appearance was perceived by some to be the result of the local community's failure to respect the 'sanctity' of this critical water source (many now living in this area have only recently migrated to the town from elsewhere). This led to a decision by local Catholic priests to erect a statue of the Madonna at the foot of the spring's overhanging cave. This, they believed, would reinforce the sacred qualities of the area and encourage mindful meditation as people came to light candles and pray to Our Lady. The young Timorese priest, who was leading this particular initiative, supposed that the erection of the statue would have no impact on the *lulik* qualities of the spring. In their reconfiguration of the site, he and his work team had taken care to demarcate places both for animist ceremonies and for Catholic rituals centred on the Madonna. Having both traditions operating in the same grounds would, he surmised, make the area doubly sacred, creating a powerful protective aura.

This syncretic solution, however, was not the view held by the ritual custodians for the spring. For them, the initiative, which began without their knowledge or involvement (although the priest did discuss it with the village head), was a dangerous and risky undertaking. Whilst most were reluctant to speak out against the Catholic Church of which they themselves were members, they were highly anxious about the potential ramifications of the initiative. It was not known,

they said, how the ancestral *dai* or custodian of the spring (*bee na'in*) would react to the placement of the statue in its dwelling place. *Dai* (as we saw in chapter two) comprise a mixture of benevolent and malevolent forces, and are known to be unruly and quick to anger. The ritual custodians were certain of one thing: the two spiritual essences—the Madonna and the *bee na'in*—could not co-exist, because a saint and a potentially malevolent spirit cannot inhabit the same space. Should this be imposed upon them, the almighty power of the Christian God would overcome the *bee na'in*, most likely driving it away (cf. Bovensiepen 2009; Allerton 2009). What they were unsure of was the reaction of the *bee na'in*. Where would it go? Would it seek retribution in the form of sickness befalling the ritual custodians, whose task it is to feed its appetites and protect the water source. Even more worrying for the ritual custodians was the possibility that it would lead to the complete drying up of the spring water. Given that Wai Lia is the headspring of the town's water supply, this eventuality would deprive the entire town and dependent agricultural fields of water.

The ritual custodians were convinced that the only way forward was for the statue's erection to be halted while all parties came together to discuss a resolution. One of them explained that this must involve a large-scale communal 'one in seven year' ceremony held at the spring. Bringing all those involved together in such a way would, they insisted, provide the proper forum to ask the *bee na'in* whether it would accept the will of the church. If this was not done, the ritual custodians continued, the benefits of a recently improved flow of water to the spring (an outcome they attributed squarely to their own post-independence ritual renaissance of house based and collective water increase ceremonies) could all be squandered. In the end while the concrete platform for the Madonna was prepared, the statue was never erected and the project is now derelict and abandoned (see Figure 7.3). Yet, in my last interview with a senior ritual custodian for the site in 2013, it was suggested that if the church continued its 'obstructionism' the next 'one in seven year' ceremony may have to be moved to another ceremonial site altogether.

The rocky outcrops above Wai Lia are now crowded with the unchecked construction of Indonesian era dwellings and ramshackle street-side market stalls crowd the springs perimeter. Contamination of the site and its waters are of increasing concern for the city's water supply

administrators as stall holders (who are mainly from elsewhere in the district) often use its semi-fenced grounds as a refuse site. Many of the newer permanent dwellings above it are also occupied by people from elsewhere, part of the Indonesian era legacy of rural to urban migration. Indeed this intra-district migration has meant that overtime many people from the origin houses of Baucau have felt increasingly marginalised. The expansion of the town upwards to the ‘new town’ on the escarpment edge has also effected previous customary agreements pertaining to village boundaries (see below). These contested land issues have been inflamed by the discourse of new land and property laws which prioritise long term occupation rights over ancestral connection and precedence.

### **Independence era water supply in Baucau town**

Giving the city’s burgeoning size, following the violent withdrawal of Indonesian troops and damage to the city’s infrastructure, water in Baucau became an even more urgent development issue. Built on karst limestone foundations at an elevation of 300 metres the town has potentially abundant water resources, yet the present water infrastructure remains woefully inadequate. The water pump station at the Wai Lia spring was established in the 1960s on gravitation principles. It has over the years expanded to include uphill water pumps, distribution reservoirs and pipes which service Baucau’s new town. The spring yields on average 25 litres of water per second which is vastly inadequate for the growing urban demand on supply. Yet even in Indonesian times sub-standard water infrastructure meant that the city was also dependent on the services of twelve water trucks.<sup>13</sup> The latest upgrades to the pump station system were carried out under the United Nations Transitional Administration (UNTAET) in early 2000 with Portuguese funding. Water from the Wai Lia complex is now pumped uphill several days a week to storage reservoirs feeding the domestic water supply of the ever-growing ‘new town’ (see Figure 7.4). While the delivery of this water to businesses and houses in the new town remains problematic, the seasonal and otherwise intermittent nature of the spring flow (see endnote six) can also have serious ramifications for the water available in the old town. Diverting water and pumping it to the new town means many residents in the old town are then without piped water at those times. The government’s water and sanitation department operates on an inadequate budget, lacking

resources to address the myriad of water management and supply issues which the city faces. In addition to large scale infrastructure limitations, the department also struggles to deal with smaller scale issues such as pipe leaks and illegal connections by residents. Those at the end of the pipe networks receive little, if any, water. Meanwhile the town's piped water is drawn from the same waters that feed the irrigation channels below Wai Lia.

As urban water needs expand so too does the demand placed on the existing infrastructure. While most government services, businesses and households have some access to the city's piped water supply, for the reasons stated above, this supply is usually inadequate and often infrequent. Some businesses and residents in the cave studded hillside of the old town are fortunate to be able to also tap springs within their own properties. Meanwhile some residential areas in the new town have been without a piped water supply for the entire independence era. In the old town disruptions to the water supply to irrigation channels lead to disgruntlement, and some say sabotage, on the part of farmers who are also dependent on this water.

Those who can afford it pay private water tankers to deliver tanks of water collected at one of the downstream springs (see Figure 7.5) <sup>14</sup>. Poorer residents in the new town buy water from the water tanker owners by the drum for fifty cents in the wet season and two dollars in the dry season. While in the wet season people are also able to collect rainwater, in the dry season a small family may spend \$15-20 per month on water, a substantial percentage of average household incomes. At the very end of one of the water pipes lies the Baucau hospital (the country's second largest) whose water supply, intermittent at best, was at the time of writing broken and awaiting the construction of an alternative piped route. In 2013, the national budget enabling water purchasing at the Baucau hospital was drastically reduced, affecting the availability of water in the hospital and forcing many patients to bring their own water in plastic containers.

In the UNTAET period (1999-2002) there were plans by international donor countries to reconfigure the water supply and distribution system but no action was taken. Since then urban water masterplans for Baucau have been proposed (but not yet enacted) in 2004, 2009 and 2014

by Asian Development Bank consultants. Since 2010 the Timorese government in collaboration with Australian government aid and technical assistance has carried out a series of scientific surveys to map and better understand the region's karst hydrology with the aim of improving the city's water supply system. This research is discussed below.

### **Groundwater research and policy development**

From January-June 2011, an international hydrogeologist advising the National Directorate for Water Control and Quality (DNCQA) carried out a series of dye tracing and monitoring activities in the karst environs of the Baucau plateau (Furness 2011). The results of the experiments found no traceable connection between the water in the Wai Lia Bere cave and water in the Wai Lia spring in Baucau. Rather the water from Wai Lia Bere cave was shown to flow (in this period at least) through the Wai Lia Mata cave then northeast to the springs of Wailili<sup>15</sup>. Water analysis from waters drawn from the Wai Lia spring showed that this water had a mean age of 2000 years (and it was noted that scientifically proving the origins of this water would be an almost impossible task)<sup>16</sup>. After carrying out a helicopter mounted electromagnetic survey to establish the likely direction of groundwater flow in the area (see Map 1.2; Furness 2012, Wallace *et al* 2012), the hydrogeologist hypothesized that the waters feeding the Wai Lia spring were in the main sourced from rainfall recharging groundwater in a zone from between the Baucau airport and Baucau's new town (see Map 4.1).

In 2014, the results of these experiments and their conclusions about Baucau town's groundwater resources were made available on the internet via a fact sheet published in Tetum by the DNCQA (Direccao Nacional de Controlo e Qualidade de Agua n.d.). While the custodians of Wai Lia Bere had, at the time of writing, not been briefed on the research outcomes from the dye tracing experiment, they remained skeptical about the experiment's results. According to their own observations the water source in Wai Lia Bere flows at its strongest in the early dry season (from May onwards) and it was only after this that waters from Wai Lia Bere reached Wai Lia in Baucau (usually around August). By placing the dyes in the waters of Wai Lia Bere in January

(and only monitoring the flows in downstream springs until June) they believed the experiments had missed this crucial part of the seasonal cycle.

Similarly, in contrast to local understandings of the interconnections between the Mundo Perdido range and the Baucau plateau (see chapter two), past and present geological surveys conclude that the much older limestone formations of the Mundo Perdido region and the younger limestone formations of the plateau are in fact separated by an impermeable rock formation (cf. Audley-Charles 1968; see Map 1.2). As noted above, the scientific understanding of the plateau's hydrogeology was further elaborated by the 2012 electromagnetic survey which mapped likely groundwater pathways through the limestone and identified potential sites close to Baucau where it might be possible to drill for water<sup>17</sup>. To obtain a more precise understanding of these potential sites further targeted electromagnetic surveys were conducted in late 2014 by the DNCQA with the support of Australian Aid and CSIRO Australia.<sup>18</sup> This research revealed further the complexity of the Baucau Aquifer, where depending on the location, groundwater flows in several different directions, via different flow pathways. This groundwater may be seasonal or represent many years of accumulation. While actual drilling for this water has been hampered for various reasons, once located it is hoped this water will become the basis for Baucau's urban water supply and reduce or halt the need to pump water uphill from Wai Lia. As this scientific research continues, the potential impact on other springs in the region of extracting this water from the karst aquifer is something which will need to be further considered and evaluated<sup>19</sup>.

While there has been a significant investment made to physically map the subterranean water pathways of the Baucau, developing an understanding of the social context in which these water resources are understood, accessed and managed has not to date been prioritized. As a result the DNCQA lacks a formal understanding of the local hydrosocial cycle and the ways in which increasing urban demands for water place pressure on the local agro-ecology. The Tetum fact sheet on Baucau's water resources prepared by the Ministry of Public Works, with support from Australian Aid, assures the public that scientific surveys have been carried out to understand local hydrology. While it states that this research has yet to locate a new water supply, the fact

sheet gives the impression that the community should place their trust in the process and government decisions in relation to the water supply issue.

In 2011 international advisors and their Timorese counterparts in the DNCQA carried out a community consultation process on developing national water laws and policy. This process in most cases involved district consultations with a group of district and sub-district administrators, village heads and community leaders. The discussions during each of these consultations were summarized in Tetum and later translated into English. The Tetum notes from the Baucau consultation convey the overwhelming concern of those present to recognize and formally engage with the role of the ritual custodians of the water (the *bee na'in*). Water custodians were identified as having the ability to give and withhold water (although there were a variety of views on the appropriateness of this in the democratic era). In the group discussion about water extraction from Wai Lia spring complex those involved stated that the government should provide money for rituals at the spring. This they said would ensure the supply and proper management of the water. However, the subsequent English translations of these notes do not clearly articulate these sentiments. Given that the international advisors involved in drafting these initial water laws and policies did not speak Tetum, it is unclear to what extent they were able to engage with the community views and concerns emanating from this consultation process. Hence in this case, despite their dutiful consultations and struggling with the DNCQA's own national level resourcing and capacity issues, such complex socio-cultural understandings of the hydrosocial cycle in Baucau were once again largely elided. However, in subsequent community consultations in 2014, carried out when developing Baucau's proposed urban water masterplan (2015-2030), the ongoing assertion of these customary priorities (see also Palmer 2010, 2011) did result in some acknowledgment of need to address and engage with the sensitivities surrounding Baucau's urban water use and the customary economy.

Similarly over the last two years the national Water Resources Law and Policy drafting process has substantially revised the approach taken to the need for community consultation on socio-cultural aspects of water when structuring water resources management. It is now anticipated that in areas where there is likely to be competing demands on a water resource, a water resources

plan may need to be developed. Such a process would require an integrated approach with detailed community consultations to identify socio-cultural aspects of the water and traditional management of the water resources. It is anticipated that these laws and policies will be finalized in 2015<sup>20</sup>.

### **Community managed water supply systems**

Despite the fact that international donors have directed significant resources at the sector, water programs and projects have to date struggled to achieve sustainable results in both urban and rural areas. In the rural areas, the model of water supply management adopted by the development industry in Timor-Leste (and indeed elsewhere in the world) has been based on community participation (Schoffel, 2006; McGregor, 2007). One of the reasons for this was the structural limitations of developing much needed state operated water and sanitation services (including lack of technical capacity and operating funds) (Schoffel 2006). In 2006 the Asian Development Bank published a consultant's report titled 'Timor-Leste: Community-managed water supply and sanitation' (Schoffel 2006). Interestingly the findings of the report were scathing in their analysis of the effectiveness of what is considered internationally to be a model of 'best practice' community participation in water supply management (Schoffel 2006: 1). In contradistinction to most critics of the failure of community based development in Timor-Leste, the report concludes that the issue is not one of a lack of community education (which, it is usually argued by proponents of the model, can be addressed with the investment of more time and follow-up resources) (Schoffel 2006).

The report does not discuss the existence of customary water user groups, their governance processes or indeed locally enforced practices such as sanctions. Rather, Schoffel concludes that the model of community participation, planning and management was itself the problem. In all community water projects surveyed in Timor-Leste, Schoffel found that despite the assumptions embedded in the model, there was no evidence that people in these communities will 'voluntarily obey collectively agreed rules to equitably share, pay for, and take care of common property without sanctions to enforce the rules' (2006: 11). Hence the report concludes that 'piped water

supply systems are unlikely to be sustainable in any circumstances in Timor-Leste without an established and qualified institution that is empowered by the state to manage them; carry out repairs and maintenance, collect user fees, and impose regulations on use and sanctions on abuse' (Schoffel 2006: 15).

In contrast to the above report, another report funded by the Asia Development Bank does mention the significance of traditional beliefs, customs and practices to the management of Timor's water resources (Costin & Powell 2006). At one point it briefly reports on concerns about the high rate of project failures, associated problems with newly configured water users groups and the need to better understand the influence of 'tradition' at this interface (Costin & Powell 2006: 85). It also states however that 'the influence of "traditional" beliefs and practices associated with water use and allocation in urban environments is largely invisible to most residents, if they exist at all' (Costin & Powell 2006: 72). Yet, as is clear from the government's own water resource consultations, even in the country's second largest urban centre of Baucau, local concerns about the need to address issues of customary use and allocation of water remain central.

While issues of system scale and the allocation of resources are critical to the long-term effectiveness of both state operated and community-based water supply systems, it is also the case that preparedness to engage with local politics and expectations of custom and tradition around water are important. In a minority of cases, where for particular reasons the ritual obligations of the custodians of the water do underpin aspects of the piped water supply management system, both rural and urban residents report a high level of satisfaction with the system and its capacities for conflict resolution. These of course are not matters without precedence. We have seen in the previous chapter, how in various localities across the region the need to create piped water supply systems drew successive colonial administrations into the ritual cycle of particular springs<sup>21</sup>. In the independence era the expectation that the government administration will contribute to these ritual events remains. In Baucau, given the ongoing dependence of the town's water supply on Wai Lia, it is expected that the government will participate in this ritual cycle by supplying the buffalo and money required for the large 'one in

seven year' ceremonies. While outsiders may see this as cynical opportunism, for ritual leaders this is simply a necessary component of a dynamic and socio-ecologically responsive tradition.

It also needs to be acknowledged that aside from government support and recognition there are many factors which impact on the current efficacy of these customary governance systems. Below I highlight some of the complexities of extant customary relationships to land and waters and the challenges that these pose to the development of appropriate governance mechanisms.

### **Ritual dynamism**

As there is a need for particular human bodies to be present at rituals, the absence of ancestral sacra can also create challenges for the present day custodianship and management of springs. This is the case with the ritual governance of Wai Lakulo, the head spring in the spring water complex of the village of Wailili. As we saw in chapter four, Wailili and its spring complex was once an important ritual centre. In the twentieth century the Catholic Church arrived and erected a grotto at the site known as Bo'o Dai (W: sacred) where ritual offerings were made to the Wai Lakulo. Then during the Indonesian occupation sacred objects associated with the spring were said to have become lost. These sacred objects, collectively named Baha Kura Mesa Baha Dala Hitu (comprising a coral necklace, a sword, a gong and a spear) are needed to properly carry out the rituals at the spring of Wai Lakulo<sup>22</sup>. In the ancestral past, these sacra were carried every year by the custodians of the waters who would enter the spring and travel up its underground chasms calling the waters forth and searching for its origins. They would travel for seven days and seven nights and while they never reached the waters source, after this yearly ritual the waters of Wai Lakulo would always flow well. While subsequent generations of custodians carried out their rituals beside rather than entering the spring, they would always have with them the ritual sacra carried by the ancestors.

The story of the loss of the Baha Kura Mesa Baha Dala Hitu sacra is ambiguous. Once belonging to the house of Loi Leki, at some point during Luca's rule of Wailili they were transferred to a neighboring house now belonging to the village of Gariuai (see Map 4.1). While the transfer of

this sacra was not necessarily illegitimate, neither was it expected to be permanent. However, as this house has not yet returned the sacra to its rightful owners (and it seems are now unable to do so) many of the descendents of this caretaker house have prematurely died or become infertile. Meanwhile without the Baha Kura Mesa Baha Dala Hitu sacra the present Loi Leki branch house custodians of the water are also unable to make the full suite of ritual offerings to the spring at the time of their new maize and new rice harvest (these sacra are also referred to as ‘the things concerning the dry (maize) and the wet (rice)’). The absence of this sacra also makes it difficult for them to reconstruct their sacred house (which was burnt down in the Indonesian era). While lost sacra may be replaced via the ritual blessing of new objects, these must be of exact replicas of what they replaced (aside from needing to agree on the specificities of now long lost objects, as a result of the conflict era this is also difficult given the regional depletion of exchange objects, especially ritual swords of various varieties and embellishments). Loss of sacra is akin to the loss of a limb: while one can still function that function is greatly impaired. Beyond the sensitivity and enormity of the challenges confronting this house, it is clear that the intention of these elders in relaying these stories to me was to record their identity as the ‘true’ custodians of the water. In the context of regional water resource developments, it was also made clear that it is they who the government should consult in relation to developments at the Wailili spring complex.

Despite the hiatus in Wailili’s once vibrant water rituals, the spring complex remains the acknowledged centre of ancestral power in the zone known as Fatumaka Leten and Fatumaka Kraik (upper and lower Fatumaka). This is was publically evident in 2013 when the village of Gariuai began negotiations with its neighbouring villages to enable a *tara bandu*, a seasonal prohibition ceremony, aimed at protecting its resources on the plateau and surrounds. The trigger for this particular *tara bandu* had been a tragic event several months before when one of the senior custodians of the Wai Lia Bere cave complex was found murdered on the plateau. The man had been tending to his buffalo in an area of sacred forest near Darasula and it is believed that those responsible for the murder were there to illegally cut timber. As we saw in chapter four, *tara bandu* like events were once at the heart of the ritual relationship between the communities connected to the springs of Wai Husu-Wai Lewa (Baucau) and Wai Lili-Wai Wa

(Wailili). While this relationship is also dormant, a further aim of the *tara bandu* was to reinvigorate the ritual relationships existing within the domain of Wai Lili-Wai Wai which was once united under the house of Loi Leki (a domain now known as Fatumaka Leten and Fatumaka Kraik). The starting point for this ritual event was an ancestral ‘mother’ pole erected by the Wailili spring complex. ‘Child’ poles were then erected at specific localities where the outwardly migrating branch houses of the Loi Leki house had first settled. Although it was originally hoped that the villages of Tirilolo and Bahu (Wai Husu-Wai Lewa) would participate as witnesses to the event, they were not expected to be formally involved.

Locally enacted customary practices of ritualised prohibitions, glossed as *tara bandu* in the national language of Tetum, are known in Makasae as *lubu badu*<sup>23</sup> and similarly in Waima’a as *luhbu badu* (literally ‘the prohibition pole’). While the practice is often referred to as ‘seasonal or periodic resource harvesting restrictions’ (Meitzner Yoder 2005: 249), it can also be more broadly interpreted as a practice which regulates a range of place-based social and environmental relationships. Elevated as a tool for forest protection by the Portuguese at the turn of the twentieth century, over several decades the practice of *tara bandu* became the favoured ‘indigenist ideology’ supported by the state (McWilliam *et al* 2014). This officially favoured status afforded to it as an indigenous ‘environmental protection practice’ has to some extent been reinvigorated in the independence era. Alongside a significant amount of community and non-governmental organization level embrace of the process (McWilliam *et al* 2014), *tara bandu* has developed a profile as a ‘traditional’ mechanism which is garnering significant attention and traction in the development of formal resource management laws, many of which are been drafted by ‘expert’ foreign advisors (Jackson & Palmer 2012). In 2013 the Secretariat of State of the Environment was also supporting such rituals through small allocations of funding and in some cases the attendance of senior government members. *Tara bandu* it seems is increasingly valued by the state as a local mechanism ‘to conserve and promote the environment and the preservation and sustainable use of natural resources’ (Article 10 (2) of the Draft Water Resources Law, Ministry of Infrastructure 2012).

What is understood today as the *bandu* process is usually conducted at the sub-village or village level at locally specified intervals (ranging from months to years). While the ceremony is announced and co-ordinated by the local political leader (usually the village head), the law making power emanates from the ancestral and ritual power of the sacred house or houses of one or more of the area's autochthonous or origin groups (in this case connected to a spring). Ceremonies are public events which announce the pre-agreed suite of prohibitions to the community and others present to witness the ceremony from outside. In the period preceding the event, outside guests will be formally invited and these may include political and ritual leaders from neighboring communities, members of the clergy, government, police and civil society. The ceremony itself will be a multi-day event involving much preparation for the law making practices, specifically ritual speech, celebratory ritual dancing, drumming and singing, betel nut exchange, animal sacrifice (which animals and how many depend on the traditions and capacity of the village and the subject of the *bandu* itself), divinatory techniques including an augury based on these animal's internal organs and communal feasting. Prior to the feasting, the relevant ritual elders must also come together to share in the consumption of specially prepared foods, which are also symbolically shared with the relevant ancestral spirits of the 'houses', lands and waters. In most areas, following the ceremony large ritual 'mother' posts and smaller 'child' posts will be placed around the locale and hung (*tara*) with relevant symbols (usually skulls of the sacrificed animals, forest foliage and crop items) of the prohibitions (*bandu*) now in place.

A further purpose of this particular *tara bandu* was to honour the ancestral sites which link the lands of different sub-village and villages in this ritual domain. In these areas 'child poles' were erected, accompanied by ancestral prayer. In what can be read as both a strategic intervention and a reminder of significance of custom in the simmering independence era disputes over land and village administrative boundaries in Baucau's new town, a child pole was placed in the town centre. Another 'child pole' was planned at an equally contentious site at the boundary zone between the villages of Gariuai, Bucoli, Bahu and Tirilolo. This ritual pole placement did not, however, go according to plan. Prior even the placement of the pole a violent altercation flared between the people from the village of Gariuai and the people of Tiriloca, a new village created during the Indonesian era (see Map 4.1). Under the 'law' of this *tara bandu* Tiriloca was

considered a ‘child’ village of Bucoli and Gariuai (villages which can be read here as representatives of the once paired domains of Wai Husu-Wai Lewa and Wai Lili-Wai Wa). The people now settled in Triloca considered that the *tara bandu* process was failing to acknowledge them as a village in their own right. The ensuing violence damaged a car and this case has now been referred for adjudication in the Baucau Tribunal. The incident has also had wider ramifications. Across the sub-district plans for other *tara bandu* have been placed in limbo while the Baucau sub-district administrator attempts to mediate boundary issues with all 11 villages in the sub-district.

While these tensions emerged as a result of a particular *tara bandu*, the disputed issues are a legacy of colonial and Indonesian era administrative process. They are also it is said, a result of the emerging ‘development’ value attached to these rural lands, and independence era developments and development plans in the area have fuelled mistrust and suspicion between sub-villages and villages. In these difficult circumstances, independence era attempts to secure resource regulation and village boundaries through either customary or formal agreement making are increasingly fragile. It is now said that people are killing each other over land.

### **Springs and national politics**

Beyond an environmentally functionalist engagement with concepts such as *tara bandu*, the intricacies and independence-era complications of the customary realm have to date remained largely unengaged by the formal policies and practices of national-level natural resource bureaucracies. In contrast, at the highest levels of Timorese politics there is at least tacit acknowledgement and engagement with custom. At this ‘presidential’ level, there is recognition of the need to ‘payback’ the debt to *lulik* and the customary realm and also to reinvigorate communication with the ancestors. During the 2012 presidential election campaign, a representative of the *lia na'in* from every district, including Major Ko’o Raku from Baucau, were brought to the national capital to preside over the presidential debate of the 12 candidates. The day before the nationally televised debate the *lia na'in* were gathered together to carry out a ritual calling for the ancestors of the earth and the sea and to bless and ritually cool the

candidates and their supporters in the presidential campaign<sup>24</sup>. In a country where democracy is a new and challenging concept, this was seen as a critical (if somewhat tokenistic<sup>25</sup>) intervention to the broad acceptance of the process. Indeed, despite the grave fears of many national and international commentators, the 2012 presidential and parliamentary elections were largely free of violence.

During the campaign itself concern was heightened as the various candidates travelled from district to district on their respective campaign trails (see Figure 7.6). Perhaps given the 2006 civil unrest and ‘ethnic’ tensions between peoples from the east and west of the country (cf. Shoesmith 2007; Office of the United Nations High Commissioner for Human Rights 2006), there was a heightened degree of tension surrounding the ‘youthful’ Partido Democratico candidate Fernando ‘La Sama’ de Araujo’s campaign visit to the Fretilin party stronghold of Baucau<sup>26</sup>. Being himself from the western region, to overcome any negative perceptions of a lack of affiliation to Baucau he was introduced to the crowd as someone with an intimate connection to the east. As a leader of the student clandestine resistance during the Indonesian occupation, it was explained to the crowd that his ‘power’ and victory in this struggle was also attributable to the many ceremonies which been carried out in his name by ritual leaders at springs and other sacred sites across the east. As a result ‘La Sama’ was now permanently connected and indebted to the east of the country. Meanwhile during his campaign in Baucau, the Fretilin Mudanca candidate Jose Luis Guterres paraded through town in ritual regalia celebrating his status as the younger brother of the present ‘king’ of Luca. He was dressed in ritual regalia for the event by Major Ko’o Raku.

Another expression of high level political engagement with the power of the custom in Baucau relates to the current Prime Minister, ex-President and ex-Falintil<sup>27</sup> Commander in Chief Xanana Gusmao. In 2004, as the then President of the new republic, he supported his former guerilla colleagues to carry out two large public ceremonies of thanks to the custodians of the water at Wai Lia Bere and Wai Lia (while it transpires that Xanana was represented by others at these events, the story is always told as if he himself was present). Buffalo provided by Xanana were slaughtered at Wai Lia and Wai Lia Bere, fulfilling a debt incurred as the result of the protection

and power that these water had afforded his Falintil fighters. It was also Xanana's CNRT<sup>28</sup> candidate Taur Matan Ruak who won the Presidency in 2012.

## **Discussion**

Across Baucau there is a renewed, if not always fulfilled, desire on the part of local populations to re-instigate a range of house and community 'resource' rituals. These rituals mark out connections across space and time and the limits of authority in particular contexts. The wishes of elders, often assisted by younger generations, to relay to me these highly personal experiences indicates also a desire on their part to have their stories told, to have their authority recognized as a part of the nation building process. Yet as we have also seen, the water research and governance processes carried out in Baucau under the auspices of the state have been slow to engage with these narratives and the renaissance of ritual practices. Nevertheless, across Timor many communities have begun to make use of the 'power of spectacle', staging events such as *tara bandu* as public performances to be captured on film and radio by a burgeoning media interest in Timorese cultural traditions (see Palmer 2007; Palmer & Carvalho 2008; Barnes 2011). These events are also significant as the self-conscious expansion of the local political and ritual spheres into the national body politic. In these circumstances, local communities are seeking an active role in the designation and management of their community lands and waters, and demonstrations of extant resource management capacities through practices such as *tara bandu* are highly important political interventions. From a local standpoint *tara bandu* is not just about conserving and promoting 'the environment and the preservation and sustainable use of natural resources'. Rather, as we saw above it, is more broadly interpreted as a practice which regulates a range of inter-community relationships. In this sense, there is no separation between a community's natural, cultural and economic resources. Yet as the state bureaucracy engages with practices drawn from the customary realm as uni-dimensional tools for environmental conservation, the social and political complexities which constitute both their 'traditional' and modern day character is elided and the power of these events are potentially compromised (cf. Zerner 1994). As such activating these rituals as 'counter maps' in the identification of resources and their governance is a politically risky strategy, but one which local peoples have so far been

willing to take, realizing perhaps better than most that negotiating the ‘friction’ (Tsing 2005) of material imaginations and practices is always messy and incomplete, dynamic and opportunistic.

Hence along with the persistence and re-emergence of local organizing principles, binaries and symbolic operators in ‘town’ life, this chapter has also made visible the internal challenges facing these complicated customary resource governance processes in the independence era. In the intricate power relations at work between relational spheres, the ritual politics of land are clearly tied to water and to associated sacred ‘objects’ which are themselves named and personified. While independence has brought with it a freedom to embrace long suppressed ancestral identities, their reassertion is often hampered by the absence of ‘bodies’ to properly mediate these connections. The presence of new governance ‘bodies’ is also something which must be contended with. These instances of loss and change often make it difficult for rituals to be carried out and even, in some instances, for sacred houses to be rebuilt. In some cases, the problem may also be that these objects or sites are now under the control of others or that the knowledge relating to specific rituals is now incomplete or lost.

Struggling with these internal challenges, in the post-independence era these house societies and their local spiritual ecologies are also subject to the imposition of a global grab bag of ostensibly apolitical and ahistorical land and resource governance arrangements (cf. Ernstson & Sorlison 2012). These challenges augment those created by the Catholic Church which has long sought to transform water from the ‘sentient substance of [diverse] earthly vitality’ to ‘living water’ symbolic of the Holy Spirit (Strang 2004: 91)<sup>29</sup>. Seeking to ‘connect and universalize’ nature (Viveiros de Castro 2004: 476), both Catholicism and modern water governance processes effectively dematerialize water into an abstract substance which ‘ceases to be particular to any place or group’ (Strang 2004: 246). In contrast, the customary realm of *lulik* practice seeks to contextually ‘separate and particularize’ a related whole (Viveiros de Castro 2004: 476), understanding ‘nature’ as always emergent and sensitive to the particular configurations of relations which make substances and their transformation.

Developing the concept of ethnogeomorphology, Wilcock *et al* write that reducing waterscapes to universalizing and technical scientific processes and ‘assuming that others will adhere to that worldview, constitutes continued colonialism’ (2013: 594). Indeed most governments assert sovereign authority over water on behalf of a citizen public and Western scientific rationalities are the ‘commonsense’ view that underpins national water resources management. Yet as Wilcock *et al* make clear, Western science is equally as able as indigenous ontologies to embrace the notion of emergent, contingent land and waterscapes, mutually constituted across space and time (2013: 595). While such notions of continual emergence may not always be prioritized in modernist interpretations, a holistic reading of the findings of the groundwater research in Baucau illuminates karst water’s complex and changing underground pathways as well as the time lags which influence its underground disappearance and emergence. These hydrogeomorphological understandings are, like those of many indigenous ontologies, based on the principle that ‘contemporary adjustments cannot be known without a basis for seeing multiple timescales simultaneously’ (Wilcock et al 2013: 594). In this multi-time space, ‘time is not linear, nor forwardly sequential, but, put simply multiple times are all happening at the same time. These multiscale relations affect current relations’ (Wilcock et al 2013: 594).

Yet in local understandings, the frictions and co-becomings of these multiple materialities of water and its governance are not imagined as spaces of uncontrolled mixing. People refer in this sense not to dynamic coexistence, but to the need for measured coexistence. For example in local peoples’ configurations the State, Catholicism, and *lisan* (customary norms and practices) are understood as distinct, if somewhat ambiguous, entities: the state attends to the nation as a whole, the church to the recently deceased; and *lisan* remains the basis of people’s identity and inter-relations in the everyday and cosmological sense. While people are proud of the fact that their new nation’s constitution recognizes the importance of their cultural identity, they also make it clear that house communities must be primarily responsible for fulfilling their ancestral obligation to these traditions. It is also clear that this aspiration for measured co-existence in diverse ontological assemblages is dynamic and, as with mythic understandings, can only ever be achieved (partially) via specific relational engagements, usually rituals.

By recognising that customary relations are by necessity always becoming, emergent across multiple bodies and times, we can also see that the transformation and the re-negotiation of power and ritual-political structures in post conflict Baucau is neither surprising nor novel (cf. Bovesiepen 2014a, 2014b). It is merely one aspect of the ongoing negotiation of relationality and autonomy which characterizes this vitalist framework of inclusive human and non-human sociality. While these complex local socio-ecological relations are enabled and directed by a moral and philosophical order which demands constant vigilance, in the modernist's illusory search for certainty these extant and very often ambiguous methods of meditating dissolution and chaos are simply overlooked (cf. Lansing 2006; McWilliam *et al* 2014). Yet while universalist ideas of nature are challenged by the particularity and 'excessive' relationality of these spiritual ecologies (and vice versa), it is because of its very dynamism and creativity that the hold of custom does not appear to be waning. Rather than seeking to supersede it, could it be that recognizing and legitimizing this sense of co-beingness and a moral order deeply embedded in the lifeworlds of kin-based economic exchange and ethical decision-making could be a catalyst for the engagement of community and the recognition of new economic and socio-ecological co-becomings in Baucau?

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<sup>1</sup> Parts of this chapter previously appeared in Palmer 2010 and McWilliam *et al* 2014.

<sup>2</sup> Population 21,000 (NSD & UNFPA 2011: 19). Since independence the capital Dili has close to 200,000 people.

<sup>3</sup> The airport had (and has) the county's longest runway. In the 1960s and early 1970s aircraft traveling between Europe and Australia would land there to refuel. For this brief time, Baucau's lush spring groves and cooler climate saw it become something of a holiday destination for intrepid Australian tourists (cf. King 1963). The airport was used by the Indonesian military during the Indonesian occupation. At the time of writing it remains closed, although the local population expects that its re-opening is imminent.

<sup>4</sup> It is believed by some Baucau residents that the custodians of the water on the plateau are able to enter the cave systems and manipulate and divert the water supply through particular underground channels (this is done via the use of woven palm fibers or more recently roofing iron) (see Palmer 2010).

<sup>5</sup> The animal's blood flowing into the water is a sacred gift to the *dai* (ancestral beings) who return the gift by fertilizing the soils and protecting crops from attack by pests.

<sup>6</sup> Baucau has a very marked wet and dry season. The dry season is generally between June and October each year. The average annual rainfall for Baucau town and surrounds is 1300 mm, with more than three quarters of this falling in the wet season. Up to 30 percent of this rainfall is thought to contribute to groundwater recharge (Furness 2004). While I do not have access to 1999 rainfall data for Baucau, national data shows that the 1998/1999 wet season was a La Nina year during which average rainfall significantly increased. During La Nina years (an extreme 'wet' phase of the Western Pacific's El Nino-Southern Oscillation) the wet season on the north coast usually starts earlier and finishes later (Pacific Climate Change Science Program Partners 2011). Given that Wai Lia is said by locals to flow

strongest from the early to mid dry season, it is possible that the stronger flow in late September 1999 may have also been a result of this increased annual rainfall. The rainfall data available for Dili shows the periods of 1973/74 and 1998/99 had the (significantly) highest rainfall on record (Pacific Climate Change Science Program Partners 2011: 4). The El Nino-Southern Oscillation occurs at average intervals of up to seven years.

<sup>7</sup> From the house of Wabubo which has a ritually paired relationship with the house of Boile Komu.

<sup>8</sup> Known as *uma lulik* in Tetum, *oma falunu* in Makasae and *umo ba'i* or *umo luli* in Waima'a.

<sup>9</sup> Given the difficulty of controlling it administratively, since early twentieth century the Portuguese abolished the recognition of hamlet (*knua*) (and their associated sacred house complexes) from their political administrative structure. At the same time, the administrative level of the district, sub-district, village and sub-village governance were increasingly alienated from the ritual and political domain of sacred houses (Soares pers comm. 2006). This resulting disjunction between the ritual and political affairs of sacred houses and the political administrative domain explains much of the present misalignment or non-communication between ritual political and political administrative concerns.

<sup>10</sup> These community rituals are also being reinvigorated at other regional springs. In 2009/2010 the spring community of Wai Mori Bere in Buibau (see Maps 4.1 and 4.2) reinvigorated their connection to the Wai Lia Bere spring and its custodians on the plateau (see also chapter four, endnote 14). During the Indonesian occupation the resident communities around the spring of Wai Mori Bere fled to the jungle, or had their lives otherwise disrupted by military occupation. As a result these spring rituals were severely disrupted and it is said the spring became dry for nearly two decades. In 2009 a ceremony was organized to make amends for this breach of ritual obligation. An offering of a chicken and a goat was taken to Wai Lia Bere and a sacrificial ceremony was carried out at the sacred banyan tree by the cave followed by a descent into the cave where 'mother water' was collected. This water (M: *ira falun*) was carried in a bamboo container along with seven bundles of betel chew to the Wai Mori Bere spring. There the sealed bamboo container of water was immersed in the centre of the spring. Following this a ritual invocation by the custodians of the water was carried out and the betel chew from the ceremony at Wai Lia Bere was spat into the water. Through this process the sins of the ritual obligation breach were cleansed and the ancestors were asked to accept the request that waters flow once more. After seven days the water began to flow. Later the water carried from Wai Lia Bere to Wai Mori Bere was ritually returned to its source on the plateau along with an offering of a pig and a goat for the sacred house of Ledatame Ikun. With the ancestral connection thus ritually reestablished a further two ceremonies were required to cement this relationship into the future. The first was a ceremony at Wai Lia Bere in 2010 when a buffalo was taken to Ledatame Ikun by the Wai Mori Bere water sharing community as a final payment for the past breach. The second required the water sharing community of Wai Mori Bere to gather together for a large ceremony at their spring to '*ira gi gini*' (M: 'bang firm' or strengthen) the re-established relationship. At this latter ceremony a buffalo was slaughtered at the spring.

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<sup>11</sup> Estimated to have ranged from 15-30 percent prior to 1975, the Catholic congregation of the new Indonesian province of Timor Timur (East Timor) grew to over 90% during the occupation (1975-1999). This was mainly the result of the requirement in the Indonesian constitution (put in place under the anti-communist regime of President Suharto, 1966-1999) that citizens must ascribe to one of the world's five major religions: Islam, Hinduism, Christian Protestantism, Christian Catholicism and Buddhism. In the province of Timor Timur, the choice of the vast majority to become Catholic (rather than something else) was partly historical and partly due to the support the church gave to the Timorese resistance during the occupation (pers. comm. Balthasar Kehi 2014).

<sup>12</sup> During the colonial period, the ancestral sacra of many houses were 'taken away' by others for storage and safe keeping elsewhere. In a ruling house connected to Luca in Wailili, the traditional symbol of rule was at some point replaced with a statue of Our Lady (*Nossa Senhora*). It is said that in subsequent decades this transgression led to the decimation of the lineage.

<sup>13</sup> In 1999 these trucks were taken by the Indonesians when they departed. They have now been largely replaced by privately owned vehicles.

<sup>14</sup> In 2014 the *bee na'in* for the spring, Wai Lua, where the water trucks now fill their tanks charged truck owners a levy of \$1 per tank (a tank of water sells for US\$12).

<sup>15</sup> As we can see in Map 4.2, the local understanding of the flows of water from Wai Lia Bere also connects it to the springs of Wailili.

<sup>16</sup> As we can also see in Map 4.2, the local understanding of the water flowing to Wai Lia is that it arrives via two distinct flows or channels—one is a deep underground channel which continues through to emerge in the tidal spring of Watabo. The another channel, which is susceptible to 'manipulations' from the *bee na'in* ('custodians of the water') flows closer to the surface and ends when it emerges in spring of Wai Lia (see also endnote 4 above).

<sup>17</sup> Baucau's limestone reefs are thickest at the coastal areas with the thinner limestone formations of the Baucau plateau being underlain by impermeable clays. Wallace *et al* (2012: 57) note that '[g]roundwater is principally near the surface in limestone Baucau plateau due to underlying impermeable clays. This restricts the potential storage of groundwater in the karst aquifer system'. Over a period of several years prior to 2012 many expensive wells had been sunk on the plateau by the government and private businesses. Each of them had come up dry.

<sup>18</sup> Pers comm.. Craig McVeigh 2014.

<sup>19</sup> See Carvalho and Palmer (2011) for a discussion of similar complex socio-ecological hydrogeology issues in the far eastern zone of Iralalaru in Lautem. In 2010 Norway proposed a mini hydropower system at the Wai Lia Spring in Baucau. The system would have resulted in spring flows being diverted away from communities that currently rely upon this water downstream of the spring. After community consultation and community concern, the proposal did not proceed (pers. comm. Craig McVeigh 2014).

<sup>20</sup> Pers. comm. Craig McViegh 2014.

<sup>21</sup> Similar ritual exchanges of piped water and animal sacrifices are reported to have occurred between the Indonesian military and the custodians of the water at the Aubaca spring near the Baucau airport.

<sup>22</sup> Similarly at Wai Lia, the custodians of the house of Wai Mata Buu will bring with them sacred ancestral spears and swords to ceremonies carried out at the spring.

<sup>23</sup> Also known as *lubu etena* (see da Costa *et al* 2006: 94).

<sup>24</sup> These *lia na'in* also appealed to the ancestors to ensure the prosperous future of the nation and particular focus was placed on securing the 'riches of the sea', specifically oil and gas.

<sup>25</sup> Such ritual blessings should not, elders cautioned, be done at the expense of careful attention to the detail of ceremonial exchange. In a discussion about the presidential ceremony, one participating elder later explained that he and others had not been happy with what they saw as 'tokenistic' aspects of the ritual. In his opinion the ceremony which is known in Tetum as '*nahe biti*' or 'rolling out the mat', was compromised at the outset by the choice of mats themselves. By tradition, the woven grass mats used in the *nahe biti* ceremony should have been drawn from inside the host's sacred house, in this case the house of Motael in Dili. Instead the mats had been bought at a shop and carried in to the event by a police officer who, it was noted, unceremoniously rolled them out onto the ground. Each house has their own style of mat which needs to be respected. In the Ossu region these *lulik* mats are woven with a particular wetland grass (M: *popo kai*) which ensures the mat rolls out with a particularly elegant flow.

<sup>26</sup> Although he was well into middle-age his campaign slogan was '*Foun sae mos bele*' (the youth can also govern) reflecting the fact that his party is an offshoot of the student resistance group, RENETIL (*Resistencia Nacional dos Estudantes de Timor Leste*, an organization for which he was Secretary General in the resistance era). Fretilin (*Frente Revolucionaria do Timor Leste Independente*) meanwhile, is thought of as the primary party of the resistance and for this reason is widely supported in Baucau.

<sup>27</sup> *Forcas Armadas da Libertacao Nacional de Timor Leste*

<sup>28</sup> *Conselho Nacional de Reconstrucao de Timor*

<sup>29</sup> Strang (2004) is referring to the period of English history (between the 6<sup>th</sup> and 16<sup>th</sup> centuries) where pagan values and associations with water were being transformed by Christianity.