

Enlivening development: Water management in post-conflict Baucau city, Timor-Leste

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This paper explores how the state and others involved in the 'development enterprise' in Timor-Leste are (mis)recognizing the potential of the existing environmental governance and exchange capacities of local customary institutions and practices in relation to water supply and management. Examining the problematic of water supply in a particular place-based instance – more specifically, the intermesh of the customary, state and market sectors – it ponders how customary institutions might be better supported to extend their range of political and economic credibility and contribute to a reconfiguration of dominant community managed water supply models. Drawing out the workings of a 'diverse economy' where a customary economy is enmeshed with, and to some extent undermining, a weak capitalist sector, the paper argues that a failure to address issues of resource ownership and control and to engage the strengths and import of local customary institutions will have serious ramifications for the successful implementation of national development objectives in post-conflict Baucau city and elsewhere in Timor-Leste. Instead, it argues for an enlivened development approach wherein locally socialized landscapes are recognized as credible political sites with which 'development' can engage and power relations can shift.

Keywords: water, custom, environmental governance, Timor-Leste, development, diverse economy

Introduction

Like the rest of postindependence Timor-Leste – or Timor Lorosa'e in Tetum¹ – the spectre and expectation of development looms large in Baucau, the nation's second largest urban centre. Since the 1999 United Nations (UN) intervention in the country, a modernist discourse of development (Escobar, 1995) has been promoted that encourages people to see themselves as underdeveloped and in need of capacity building. Yet in this 'in desperate need of development' economy, what also looms large is a vibrant customary sector built on richly complicated processes of exchange, which are also enmeshed in complicated relationships with the state and market sectors. In this paper I explore the extent to which this customary economy is influencing the reconstruction and development of a postcolonial, post-conflict regional city. Taking as my starting point karstic water resources in the urban centre of Baucau District, I examine the ways in which their development is being hampered by the (mis)recognition of a dynamic local customary economy, which to some extent still regulates people's access to, and control and management of these resources. Recognizing and legitimizing an economy deeply embedded in the lifeworlds of kin-based economic exchange and ethical decision making could, I argue, be a potential catalyst for the engagement of community and the recognition of 'new economic becomings' in Baucau (see Gibson-Graham, 2006: 58–59).

Baucau city is still riven with the legacy of a violent colonial occupation and most inhabitants live with the effects of deep psychological trauma and physical

impoverishment.² Since independence the highly centralized state bureaucracy has allocated little in the way of a development budget to the city's administrators and Baucau has been largely dependent on the vacillations and competing priorities of international aid pledges, nongovernment organization (NGO) programmes and, increasingly, the meagre social assistance afforded by the regional Catholic Diocese. While administrators and aid agencies continue to seek ways of encouraging economic growth and implementing development programmes in the region, this paper argues that all this planning to deliver services, build local capacity and create jobs by the modernist development project fails to recognize the extant capacities for active economic engagement and resource management already manifest in customary practices. More pertinently in relation to my case study of water resources in Baucau, a failure to engage with the customary economy is actively undermining the potential of the state and capitalist sectors. Whereas customary practices are recognized as relevant considerations in the surveying and development of Timor-Leste's vast rural hinterland, urban enclaves are imagined to harbour only remnant traditions (see ARD, 2008). Yet, despite official ideologies to the contrary, urban residents also enact customary claims to control place and resources (cf. Blomley, 2004). Moreover, while much academic and increasingly governmental focus has been placed to date on customary land tenure issues (Fitzpatrick & McWilliam, 2005; ARD, 2008) and land based resource management practices (McWilliam, 2003; Meitzner Yoder, 2005), customary practices in relation to the governance of aquatic environments has attracted relatively little attention (see McWilliam, 2002; Palmer & Carvalho, 2008; Jennaway, 2008). As such this paper contributes to an ongoing investigation of the ways in which water use and management is understood and practiced by the various communities in Timor-Leste and, more importantly, to developing a literature on customary management in karst hydrological systems (that are found widely across the Timor-Leste waterscape). Finally, by beginning to map the stories and customary institutions that continue to circulate through Baucau's urban landscape in relation to water, this paper also explores what import these narratives and practices have for Baucau's ongoing development. With the lifeworlds of most Timorese infused to varying degrees with customary economic thinking and practices, I argue that outsider engagement with the range of associated complex customary governance practices is essential to pursuing hybrid development alternatives in this region (Curry, 2003; Gibson-Graham, 2006; McGregor, 2007).

This paper is based on eight months of ethnographic participant-observation fieldwork in Baucau city and its hinterland between April 2004 and May 2009. It draws on an analysis of fieldnotes from formal and informal interviews, as well as opportunistic observations and conversations with community members, bureaucrats and development workers, and from frequent participation in a range of household, community and ceremonial events such as marriage, mortuary, agriculture and water related rituals, preparations, negotiations and discussions. Given the focus on social, economic and cultural relationships it is pertinent to note that the research process was facilitated by my own close and extended kinship ties (through marriage) with many families in the Baucau region. This qualification is not intended to preclude those without such connections from arriving at similar insights or understandings but, rather, to highlight the extent to which access to such information is linked to sustained engagement with extended local social and political networks, as well as an openness to participate in and take seriously the range of diverse social, economic and cultural activities and relationships which one may be exposed to in the process.

Recognizing the customary economy

Similar to indigenous customs and traditions elsewhere in the region (Fox, 1997), the indigenous worldview in Timor-Leste is based in an understanding of place as enlivened by an ancestral and nature spirit world (Hicks, 1976). In this world, families of (usually) patrilineal lineages are organized around origin groups linked to particular sacred houses (*uma lulik*) which embed those families in intimate, intergenerational social, political and economic relationships with their extended consanguinal and affinal kin from other sacred houses. Links between lineages and with the surrounding environment are embedded in a lifeworld of asymmetrical exchange, obligation and reciprocity built around dualisms such as male/female, wifegiver/wifetaker, younger/older sibling, indigene/newcomer, political authority/ritual authority, and a suite of botanical metaphors such as trunk/tips – in short, representations of the harmonious (or conflictual) relations that ensure the ‘flow of life’ (Fox, 1980). Despite 500 years of Portuguese colonialism from the sixteenth century (Dunn, 2003), Timor experienced an indirect and often tenuous foreign rule and this indigenous worldview remained the paradigm around which daily political and economic life revolved (Gunn, 1999). The subsequent Indonesian era, beginning in 1975 with a violent invasion, saw an interventionist suppression of local autonomy. Since attaining sovereign statehood in 2002 there has been a revitalization of indigenous custom and tradition with, for example, an increasing number of villages and subdistricts where the communal management of natural resources (fields, forests, fisheries) is being enhanced by the reinstatement of communal ritual prohibition and/or harvest ceremonies (Meitzner Yoder, 2005; McWilliam, 2003; Palmer, 2007; Palmer & de Carvalho, 2008).

Building on the diverse economy work of Gibson-Graham (2006), this paper sets out to fully integrate into the notion of a diverse economy the workings of a complex customary economy, one that, in this case study at least, also has profound contemporary relevance for issues of environmental governance (Lemos & Agrawal, 2006). The diverse economy includes ‘all of those practices excluded or marginalized by a strong theory of capitalism’ (Gibson-Graham, 2006: 60) in an approach that focuses on ‘new economic becomings’ and rejects those decontextualized and ‘capitalocentric’ approaches to ‘social capital’ where local social and cultural practices and relationships are embraced only as a means to further externally oriented ends.³ Gibson-Graham’s (2006) diverse economy seeks a nuanced and close reading of diverse economic practices and the ways in which these practices are enmeshed in a larger whole. In Timor-Leste an almost complete lack of land markets (at least 80 per cent of the land area remains untitled) ensures that an important component of the formal capitalist economy is absent. With commercial markets for local produce similarly limited, local production, resource exchange and sharing in rural areas continue to be underpinned by an adherence to local customary governance practices including intergroup exchange arrangements, as well as interpersonal relationships and historical circumstances.

The role of the customary economy in a diverse economy context is frequently disruptive of attempts to put in place capitalist logics. In Baucau I was struck by the pervasive insistence of local autonomy embedded in narratives and practices of the existing customary economy. Similarly, in her examinations of the resurgence of what she terms ‘a ritual economy’ in rapidly modernizing, postsocialist, rural southeast China, Yang (2000: 477) has noted an ‘economic logic which is subversive of capitalist, state socialist, and developmental-state principles’. Calling such an economy a ‘ritual-market economic hybrid’, Yang (2000: 487) posits that ‘the market economy and the

ritual economy of expenditure emerged hand in hand' in Wenzhou, where a significant segment of the surplus from business enterprises and wage labour is reinvested through expenditure that reinvigorates the ritual economy and redistributes surplus wealth. It is a case, Yang (2000: 477) argues, of an indigenous economy experiencing renewal and 'posing a challenge to capitalist principles', rather than the other way around.

Despite the postindependence rhetoric of economic development, most people in Baucau have had little surplus wealth to reallocate. However, local economic exchange principles maintain a hold over resource allocation and use in ways which pose a serious challenge to conventional understandings of economic development. Baucau, like Wenzhou, remains a place firmly ensconced with the workings of a customary economy and manifestations of an informal economy (such as unpaid labour associated with NGOs, churches and sporting clubs, as well as activities such as gambling). Within such a diverse economy, local people engage with the customary economy not as passive recipients of projects and programmes but as active players in a lifeworld of mutually comprehensible norms, principles and power relations.

It should be noted at this point that the customary economy is not without negative aspects. For example, particularly in urban landscapes brimming with aspirational modernity, the burden of customary obligations can be overwhelming, whether in relation to environmental governance or other aspects of the social world. People often state that *lulik*, the sacred animist realm, is too greedy and excessive (cf. Ospina & Hohe, 2001: 175). For Baucau city dwellers and wage labourers in particular lifecycle and intergenerational customary exchanges between sacred houses and the associated wifegiver/wifetaker clan groups – of things such as buffaloes, horses, goats, swords by the wifetakers, and pigs, necklaces and woven cloth by the wifegivers⁴ – are made via monetary payments which are either pooled and used in the exchange directly, or used to purchase the livestock and goods to be exchanged. However, local critiques of the excesses of the ritual economy suggest not only the phasing out of customary processes or replacing them with capitalcentric approaches, but also a range of precedents within the customary repertoire that draw on the power of communal ritual processes to impose reductions on the sizes of customary payments (see Palmer, 2007; Fox, 1979: 32; Meitzner Yoder, 2007: 47). Such cases further demonstrate the need to engage with the full range of resource management practices embedded in the customary economy.

In the realm of environmental governance too, a greater understanding of alternate practices and claims to resources is essential for more integrated and sustainable environmental management practices, particularly in relation to water (Altman, 2008; Strang & Toussaint, 2008; Lansing, 2007). With ritual at its core, the Baucau customary economy is embedded in reciprocal social relations where local resources (land, water, trees, fields) are understood as relational fields 'whose offerings to humans must be compensated through sacrifice' (Yang, 2000: 482). It is an understanding of power and of the world which both enlivens and connects place and people. It is in short a socialized landscape where ritual performance constitutes 'serious world making' and governance work (Verran & Christie, 2007: 219). Building from an understanding of Baucau's diverse economy, this paper examines some of the critical water resource challenges in the region and suggests a framework for working through these environmental governance challenges whereby effective decision making over resources and their allocation is tied to a broader sociocultural understanding of interdependence at the social, economic and environmental level.

'Community managed' water supply and management

Baucau's serious development problem relating to water management is juxtaposed with the countrywide problem of Timor-Leste being poorly endowed with water, a resource constitutionally defined as owned by the state (Pederson & Arneberg, 1999). A national water policy is in process (for the draft plan covering 2008–2013, see ADB, 2007), with water and sanitation services either nonexistent or in critical disrepair across much of the country. Consequently, the model of water resource management adopted by the development industry in rural Timor-Leste has been based on a community participation model (Schoeffel, 2006; McGregor, 2007). One reason for this was the structural limitations of developing much needed state operated water and sanitation services (including lack of technical capacity and operating funds) (Schoeffel, 2006: 14). Interestingly, in 2006 the Asian Development Bank's consultant's report (Schoeffel, 2006) was scathing in its analysis of the effectiveness in Timor-Leste of what is considered internationally to be a model of 'best practice' community participation in water supply management. In contradistinction to most critics of the failure of community based development in Timor-Leste, the report concluded that the issue is not a lack of community education (which proponents of the model argue can be addressed with the investment of more time and follow-up resources) but that the model of community participation, planning and management was itself the problem. In all of such community water projects surveyed in Timor-Leste, the report (Schoeffel, 2006: 11) 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'. Hence:

pipled 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 (Schoeffel, 2006: 15).

The 2006 ADB report does not anywhere discuss the issue of customary governance processes and sanctions in relation to water use and management. Yet, as this case study of a non-community managed urban water supply system in Baucau reveals, it is precisely the lack of formal incorporation of customary management processes between and within *communities* which is causing many of the problems.

In contrast, making visible, taking account of, and engaging with water based customary management practices and associated principles of economic exchange would, I argue, contribute to an opening up of important sites of politics for the management of water in Timor-Leste. Such an approach would create 'a place of encounter' between those in control of the formal system and those who have normally no part in that system (Dikeç, 2005), engaging more fully with the lifeworlds of those whom a developing national water policy is meant to benefit. The import of these practices for the cultivation of sustainable water supply and economic development in urban Baucau is explored below.

Managing water in Baucau city

Baucau city comprises an 'old' and 'new' town made up of four *sucos* or villages, and a population of approximately 16 000 people. It serves as the capital of Baucau District, which consists of six subdistricts, one of which is Baucau subdistrict, the immediate surrounds of 13 *sucos* for which it is the local administrative centre (Figure 1). Much of

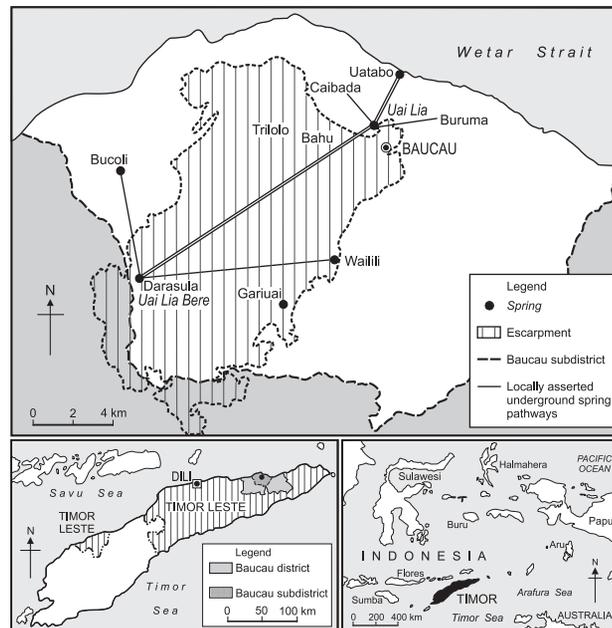


Figure 1. Location of the study area showing the underground spring pathways asserted by traditional knowledge and myth narratives in Baucau.

the administrative sector and basic infrastructure was damaged during the violent withdrawal of Indonesian troops in 1999. Above the old town built into karst cliff faces during the Portuguese colonial era sits the Indonesian-built new town, the residential and regional administrative, transport and trading hub, which is host to a bustling yet ramshackle daily market selling imported household goods and livestock, meat, fruit and vegetables from the rural hinterland.

Water became a major development issue in the wake of Indonesia's withdrawal. Built on karst limestone foundations at an elevation of 300 m Baucau city has potentially abundant water resources, yet the present water infrastructure remains woefully inadequate. The water pump station at the Uai Lia spring in the old town was built by the Portuguese colonial administration in 1966. Established on gravitation principles it expanded over the years to include uphill water pumps, distribution reservoirs and pipes serving the new town. In the Indonesian era the substandard water infrastructure meant that Baucau city was also dependent on the services of 12 water trucks (which Indonesian troops repossessed on withdrawal). More recent upgrades to the pump station system were carried out under the aegis of the United Nations Transitional Administration (UNTAET) in early 2000 with Portuguese funding, even while urban growth put pressure on the supply. The government's water and sanitation department operates on an inadequate budget, lacking resources to address the myriad of local water management and supply issues. In addition to large-scale infrastructural limitations, the department also struggles to deal with smaller scale issues such as leaks and illegal tapping by residents.

While most businesses and households in the new town can access the piped water supply, this is usually inadequate and only available at specific times. And while some residents on the cave studded hillside of the old town are fortunate to be able to also tap springs within their properties, old town residents are left without piped water when

their supply is periodically diverted and pumped to the new town. Those who can afford to, hire private contractors to truck water collected at one of the downstream springs to their premises. However, as the centre of trading and administration, Baucau's inadequate water supply has acute development implications.

In the UNTAET period (1999–2002) there were plans by international donor countries to reconfigure the water supply and distribution system and draw water directly from a large spring near Darasula, a village approximately 20 km away on the Baucau plateau (elevation 500 m), rather than from the spring lower down at Uai Lia, in the old town. To date there have been no scientific surveys done to map and better understand the town's karst hydrology.

Water and the customary economy

Interviews, conversations and participant observation with senior people across Baucau District⁵ confirmed local people's varied and complex understandings of the region's karst hydrology, particularly the interconnections between water flowing from the mountains to the rivers, springs and sea. Much of this knowledge concerns the direction, location and flow rates of underground water channels. It is well known for example that the Darasula spring (known in Makasae as Uai Lia Bere – Big Uai Lia) is a main conduit for water flowing to other springs lower down, on and off the plateau. It is said that this water from Darasula channels off through underground cave systems in four directions (an area of roughly 20 km²): one to the western edge of the escarpment to the village of Bucoli, one to the eastern edge of the escarpment to the village of Wailili, one to Uai Lia spring in Baucau city and a parallel one directly to the coastal springs of Uatabo below it (Figure 1). An underwater spring in the ocean off the coast from Uatabo is known to be the final exit for much of the spring water which comes down through the Uai Lia and Uatabo conduits.

While it remains to be investigated how much of this traditional local knowledge of regional water resources corresponds with scientific understandings of water behaviour and movement in the karst system, this paper is concerned with the ways in which this knowledge is interwoven with the social and political landscape. As Jennaway (2008: 28) has written in a review of the Timorese ethnographic literature:

Cultural constructions of space, kinship affinities and social identity encoded in water and articulated in myth and ritual enactments constitute evidence of profound local affinities with local water sources in the fluid social and cosmogonic economy of East Timor.

Likewise, in 1976 Hicks (1976: 21–24) wrote about the karst springs in neighbouring Viqueque District as being important conduits between the sacred and secular worlds, leading as they do, in local understandings, down into the earth's womb. In my own research this sacred world beneath the earth's surface has been variously characterized as a watery world populated by sacred animals, people, luscious food gardens and material wealth, and as connected to the secular (and indeed celestial) world through multiple layers of often cryptic or obscure connections and practices. Many of these connections are illustrated in detailed regional water myths or narratives, which when combined with present-day water management and water rituals invoke bewilderingly fluid, interwoven and compressed understandings of time, space and being.

Across the region interconnected springs are understood to be in familial (usually older–younger sibling) relationships that mirror the social world of the sacred houses connected to these water bodies. To ensure the ongoing flow of water to these springs,

annual ritual ceremonies of invocation and sacrifice must be carried out at each spring to feed the *beenain* ('owners of the water'), the spirit beings that inhabit and control it. Led by senior people with direct ancestral connections to these spirits, these ceremonies require the participation of the wider community and are, in this way, collective events, ideally well attended and *rame rame* (lively). These seniors – who are also often known as *beenain* but more properly thought of as temporal representatives of the underworld *beenain* – decide with other senior and community members on what the local uses of that water will be and where the water will be channelled to in any subsequent above or underground diversion. Traditionally the temporal *beenain* are also central players in any resolution of disputes over water or in addressing issues of water wastage and abuse. Even today they still take a keen, if formally muted, interest in any proposals for the development of water infrastructure which might affect 'their' water sources.

Specific information relating to the knowledge of these springs and associated mythscapes is not easily accessed. Before entering into such discussions there are formal ceremonial processes that need to be followed and it is continually asserted that to speak freely is to invite misfortune ('*la bele koalía arbiru deit*'). Nonetheless most local people have a general awareness of mythic connections between particular springs. In the case of Uai Lia, the main spring in Baucau city, it is well known that the management of the spring source is intimately linked to its connection with the Darasula spring, a relationship which embeds these localities through mythical narrative in two of the most important organizing principles of Timorese social life: those of the older–younger sibling (*maun–alin*) and the wifegiver–wifetaker (*umane–fetosaun*) traditions. The latter creates an ongoing asymmetrical ritual and exchange relationship between the peoples from the two areas, linking them and their water resources together. A commonly heard assertion in the various myth narratives of the Uai Lia spring is that the springs are connected by an intergenerational relationship formed when a man from the Darasula spring was dragged down underground through the water channel complex, emerging at Uai Lia where a local woman, whom he later married, came to his aid. Ever since, the role of the 'wifetakers' at the Darasula spring has been to provide their 'wifegivers' at Uai Lia with water, the source of life; in return they have received the asymmetrical, yet essential, gift return of annual sacrificial ceremonies carried out by the peoples of the Uai Lia spring. The ancestral journey of the Darasula man, who married and settled in Baucau society in this way, subsequently created a lineage of *beenain* for the Uai Lia spring. It is the responsibility of this lineage and those connected to it to honour the relationship between the two springs through annual ceremonies and sacrifices. Moreover, these practices must, according to the myth, be collectively carried out by the four city villages dependent on this spring, and who are themselves in older–younger sibling relationships to each other. These sacrificial processes of 'giving food' ('*fo han*' in Tetum) involve ceremonial dancing and singing for seven days and seven nights before the elders can call forth and commune with the sacred eels (also manifestations of the *beenain*) which inhabit the springs.

Given that ritual management of these springs is tied in local understandings to the actual supply of physical water resources, it is also necessary to discuss the complicated and often fractious water management system based on some people's intimate knowledge of the hydrological systems connecting the springs. Indeed both at Uai Lia and many other springs in region, if the water supply is not flowing as well as might be expected at any given time, senior ritual leaders may decide that there is a need to offer tribute to the *beenain* at the Darasula spring. The Darasula *beenain*, it is said, possess a detailed knowledge of the underground water conduits which enables them to enter the

cave systems and divert underground water channels using woven palm matting, or more commonly today corrugated iron sheeting. Among those asserting that this occurs, it is held that such detailed knowledge of the cave and gating system is sacred and prohibited from being passed outside the *beenain's* lineage through fear of divine retribution. Any changes to water flows within the cave systems require the *beenain* to first carry out ceremonies and seek permission for their activities from the ancestors. These are not trivial matters.

This capacity to actively divert water however is denied by the *beenain* of the Darasula spring. While they concede that the water flowing from Uai Lia Bere to other areas on and off the Baucau plateau can be highly variable (and in the case of water flowing to Uai Lia counterintuitive, as the flow is weak in the wet season and stronger in the dry season), they maintain that this is a 'natural' process. By 'natural' they mean that the water (nature) itself is responding to the presence/absence of the annual requisite gift giving and ceremonial activity of those lower down the water chain. The agents of this water flow control are asserted to be the underworld, and true, *beenain*.

The apparent impasse between assertions – of human-made diversions on the one hand and of the actions of a displeased spirit world on the other – is at one level inconsequential to the actual causes of the lack of water in Baucau's Uai Lia complex. Parties to both positions would most probably agree that a resolution to the issue would necessarily involve the honouring of the sacred wifegiver–wifetaker relationship between the two springs and the collective coming together of the four Baucau city villages in their respective older–younger sibling relationships, through which they must carry out the required annual ceremonies and sacrifices. Only when these relationships are in order will water return to Baucau.⁶

Because of a complicated set of historical circumstances, the ritual management of the Uai Lia spring in Baucau is today somewhat dormant, at least at the level of collective community engagement with the process. The sacred house built at Uai Lia to carry out such activities had been destroyed and replaced by a house belonging to the Portuguese colonial administration. As well as this, in the post-World War II era the efforts of local elders to carry out the requisite sacrifices are said to have been hampered by a tax placed by the Portuguese on the slaughter of animals. During the Indonesian era the ritual was reportedly practiced only once in the 1990s – ensuring a supply, if not abundance, of water in that period. Since the Indonesian withdrawal from Timor-Leste in 1999 many traditional ritual and political rulers have either passed away or fled to Indonesian West Timor, adding yet another obstacle to the customary governance of the spring. Nevertheless, in 2000, elders from the four city villages decided to organize and carry out the required ceremonies and, with the assistance of a government officer from Baucau's water department, transported animal sacrifices to the spring at Darasula. From 2000 until 2003 there was an abundance of water in the Uai Lia conduit. By 2004, however, these ceremonies had not been repeated and the water supply at Uai Lia has been intermittent.

Governance of the Uai Lia complex

Today none of the relationships and ceremonies described above is prioritized in the centralized formal management of Uai Lia. Water channelled through the Uai Lia conduit via the government water supply system must somehow be shared and allocated between the four villages. In times of water shortage, the village heads must come together to agree on a shifting annual allocation of agricultural water among these villages.

While the government water and sanitation department officers are not unaware of the customary water management system and its hold over issues of water supply at Uai Lia, the extent to which this is openly discussed in communications between the national and the Baucau regional office is difficult to gauge. As noted above, such issues are very sensitive and both government officers and customary leaders are generally reticent to discuss the matter outside of formal processes. For example following each of my formal interviews with senior ritual leaders who divulged specific details of regional spring myth narratives, an animal had to be sacrificed to '*taka naran*' – literally 'close the name' of, and placate, the ancestral beings who were spoken about; failure to properly close any discussion on ritually important matters is to invite misfortune.

All this emphasizes that performing ceremonies and engaging in the full suite of customary processes is complicated 'knowledge work' (Verran & Christie, 2007: 218) which must be properly negotiated by ritual and political authorities. In the case of Uai Lia this requires the participation of representatives of all the four villages and an immense investment of skill, time, community coordination and money. Community members must take the initiative to coordinate preparation activities and to collect the money, which in the difficult postindependence economic environment is scarce and difficult to spare for most households. Moreover, for those who are not engaged in rice farming or whose livelihoods are not dependent on plentiful timely water resources, there is less incentive to pay tribute to customary owners or give money for rituals honouring the sacred relationship between the two springs – a respect which might otherwise have discouraged 'illegal' tappings into Baucau's water supply.

At the same time, Baucau city, with its access to markets, government and international aid money, is reportedly perceived by the Darasula *beenain* and water users to be resource rich and yet expecting to receive water without returning anything to the Darasula *beenain*. The government pipes the water for civic needs while some people illegally tap into this supply and others even collect water in trucks and profit from its sale – all being activities seen by the *beenain* (either temporal or ancestral) as violating the foundational principle of the Uai Lia myth narrative. Baucau's residents are sympathetic to this sentiment and many agree that something needs to be done. A traditional political leader of one of the four villages explained that the government and the NGO sector 'just take water; they don't know how to make it. They pick the fruit, but they don't know how to grow it. They have no interest in *lulik* [the sacred]' (pers. comm., May 2006). Such sentiments highlight the considerable slippage and overlap that exists within local community notions of water as a public good provided by the state, as a locally managed community commons and as a commodity available for private sale.

Meanwhile the Darasula *beenain* and community face their own historical constraints in the governance of their spring. Local people recount attempts in the 1960s by some Chinese people from Baucau to build permanent water infrastructure for market gardening at the spring site. Their unauthorized activities, it is said, led to the collapse of one of the cave entrances and the destruction of the seven underground water pathways known by the *beenain* to exist inside the cave (all of the Chinese are said to have been killed in this accident). Following this, in the 1990s the Indonesian authorities are said to have arrived at the spring with a large-scale plan to construct infrastructure at the site to enable water to be pumped directly from the Darasula spring to Baucau. After bulldozing the underground cave site, dynamiting it to clear an opening for the placement of pipes and other infrastructure, sinking two metal pipes into the spring (where they remain) and building a small pump station nearby, their attempts to

harness water from the spring were ultimately unsuccessful (and, it is said by the *beenain*, upon later returning to Indonesia, all of those involved in the ill-fated project died). However, according to local people their own (reluctant) involvement in the process, and the fact that some of the requisite ceremonies were carried out by them at the time, resulted in the Indonesian authorities being able to extract enough water from the spring to be piped to meet the needs of the nearby Darasula community. But today, the mini-pump station has fallen into disrepair and the local community are again reliant on smaller springs closer to their villages for household water needs. Local people say they are aware of more recent government plans to pump water from Darasula directly to Baucau but that so far nothing has materialized.

It is asserted by some that if the Timorese government and the development sector were serious about fixing the water problem in Baucau, they would come together and formally talk with the ritual authorities and discuss the need for the sacred alliance between the two springs to be honoured and for the ceremonies at Uai Lia to begin again. Until the population is actively involved (directly or indirectly) in the management of water in this way, nothing will be resolved or properly implemented: the Darasula *beenain* will continue to withhold water and Baucau city residents will continue to abuse a 'common property' resource alienated from its community of commons. The process of agreement making on regional water management and supply needs to formally engage elders, government bureaucrats, development agencies and communities. Yet it is also recognized that such a process would itself be fraught with the very real possibility that such engagements may be little more than a means of demarcating and controlling the customary economy (cf. Zerner, 1994: 1107; cf. Lansing, 2007). For example, it is recalled that when such community ceremonies were carried out in the Indonesian era, the authorities would support the event itself with a substantial grant of money but frequently, and inappropriately, appointed 'leaders' to conduct the rituals. This resulted in a desacralization of the process and ineffective, if not dangerous, ritual practices. In the postindependence era it is expected that if mutually harmonious relations were to be achieved, the financial support for such ceremonies would be ongoing rather than event based, and that the government would recognize that such processes need to be fully engaged with and led by those properly appointed at the local level. While the exact pathways of engagement which might be considered are beyond the scope of this paper, there is clearly a desire among local people for the government and other relevant players to embrace locally relevant forms of ethical decision making and place-based water management practices. Moreover, to fully examine both the materiality of water use and gifting channels between water users, more research is necessary to understand the complex interrelationships between the state, market and customary sectors, and to map local karst spring pathways, the associated sociocultural formations and independencies of local polities along with water infrastructure and irrigation flows (see Palmer, forthcoming).

Conclusion

The waterscapes alluded to in this paper constitute a poetic politics, an insight into the workings of Baucau's customary economy and the relationships and social institutions through which, at least some, water resources in the region are managed and controlled. Because these customary practices are processes in which people are not passive recipients of projects and programmes but active players in their own lifeworlds, they are critical components in the pursuit of 'development'. This is not to idealize traditional

communities as capable of managing their resources if only state and/or development sector would butt out – their diverse governance regimes are too ‘mixed up’ for that to be feasible, even it was desirable. Recognizing that ecological resources are embedded in complicated sociohistorical contexts is also to recognize ‘tangled threads, difficult to unpick’ (Mosse, 2003), especially in a country of diverse cultural governance regimes as Timor-Leste. Moreover, the story of water politics recounted, replete with jealousies over resource use and access (cf. Mosse, 2003), is not unfamiliar. There never was a ‘golden age’ of harmonious cooperation; rather, there have always been varying degrees of ‘uncertainties, disharmony and disruption’ (Mosse, 2003: 4) as well as cooperation in the processes of social and political negotiation that address the changing economic circumstances of water resource use.

The critical point of this paper’s own narrative is the necessity for the extra local recognition of the deeply embedded exchange relationship between two intraregional water bodies and their associated communities, one of which happens today to be the second largest urban centre. Indeed while the lifeworlds of the majority of Timorese remain infused with a deep commitment to material and ritual exchange, and cooperation between familial groupings (on matters such as marriage, land ownership and resource use), these are issues that will need to be incorporated into ‘development’ pathways. As Curry (2003: 417) has written in another context:

Without exchange, the quality of life declines, social relationships are suspended, and opportunities to resolve conflicts decline. In short, exchange makes community, and without exchange there can be no community.

Equally, in Baucau, concern about the impact of this lack of community (within and across scales) need not necessarily be confined to this particular instance of environmental governance. In a range of other spheres, the breakdown of exchange and social relationships is said to be responsible for poor crop yields, social disharmony, infertility, sickness, death and other misfortune (cf. Curry, 2003: 417). Yet given the well documented resilience of many such socially embedded economies (Curry, 2003; Yang, 2000), it is possible that these same place-based practices and gift relations could be potential agents for the transformation of market and state configurations of natural resource management in Baucau and elsewhere in Timor-Leste.

Exploring the Timorese cultural search for harmony through opposing dualisms, Trindade (2008: 22) has written that there is a real need ‘to properly reconcile the “outsider”, the concept of nation-state and its processes “inside” Timorese belief systems’ (original emphases). What this paper has suggested is an equal imperative to properly reconcile such ‘outsider’ concepts and practices with the ‘inside’ customary practices and processes that permeate everyday life through the management of local economic resources. Such an approach would recognize the strengths of customary institutions – their local legitimacy and moral suasion – along with their dynamism and adaptive capacity.

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Endnotes

- 1 The cultural terms and concepts glossed in the national Timorese language Tetum in this paper are, depending on the speaker and context, locally rendered in either the Makasae or Waima'a languages. Because of this spatial and temporal ambiguity, key cultural concepts are provided in Tetum.
- 2 The Indonesian occupation of the country from 1975 was characterized by intensive military control and surveillance of local populations, opposing guerrilla warfare by Timorese forces, and widespread abuses of human rights, and loss of lives (estimated at 200 000) and property (CAVR, 2006).
- 3 For example in relation to the resurgence of communal ritual prohibition (*tara bandu*) in some areas, there has been a problem of selective use of the process by government authorities seeking only to improve nature conservation outcomes (cf. Meitzner Yoder, 2005: 252).
- 4 The asymmetrical relationship between wifegivers and wifetakers here favours the wifegivers who, as the givers of life, fertility and future generations, must be compensated to a greater degree.
- 5 Seven interviews were carried out with four *lianian* in separate locations and the data obtained were corroborated through interviews and participant observation with other community members on other occasions (including participant observation of a water ritual carried out at the Darasula spring with a number of local ritual leaders and 20 or so other community members).
- 6 At the same time as the Uai Lia spring suffers water supply shortages, other springs in the plateau region known to be linked to the Darasula conduit which local people depend on for agriculture often experience plentiful supplies of water.

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