

South Africa Review

As part of

“A review of community-based governance in South Africa, and southern Africa (Mozambique, Zimbabwe, Zambia, Botswana, and Namibia) pertaining specifically to freshwater systems”

Until 1995, 'tribal' institutions comprising tribal authorities, presiding over tribal districts, were the principal form of local government in the former homeland areas - now known as 'communal lands' of South Africa. Each district had a chief, village headmen, appointed councillors and officials. The contemporary tribal institutions found in the former homelands are derived, in part, from the incorporation of pre-colonial forms of African government into first the colonial, and later the apartheid system of administration. Prior to the arrival of European settlers, the most important socio-political unit of southern African society was the tribe, composed of people loyal to a single chief and believed to share a common ancestry. The chief was the leader and most powerful member of the tribe, combining important political and religious functions (Letsoalo 1987). The power of chiefs was severely diminished under colonial rule and in many cases later co-opted for political gain by the ensuing apartheid regime. The powers of chiefs today reflect a poorly-defined mix of customary practice and apartheid-era legislation (Bennet 1995), together with newly introduced statutory reforms to their powers. Thus, attempts to explore locally-evolved systems for natural resources management (NRM) are severely constrained by this socio-political landscape of the 20th C.

1. Introduction

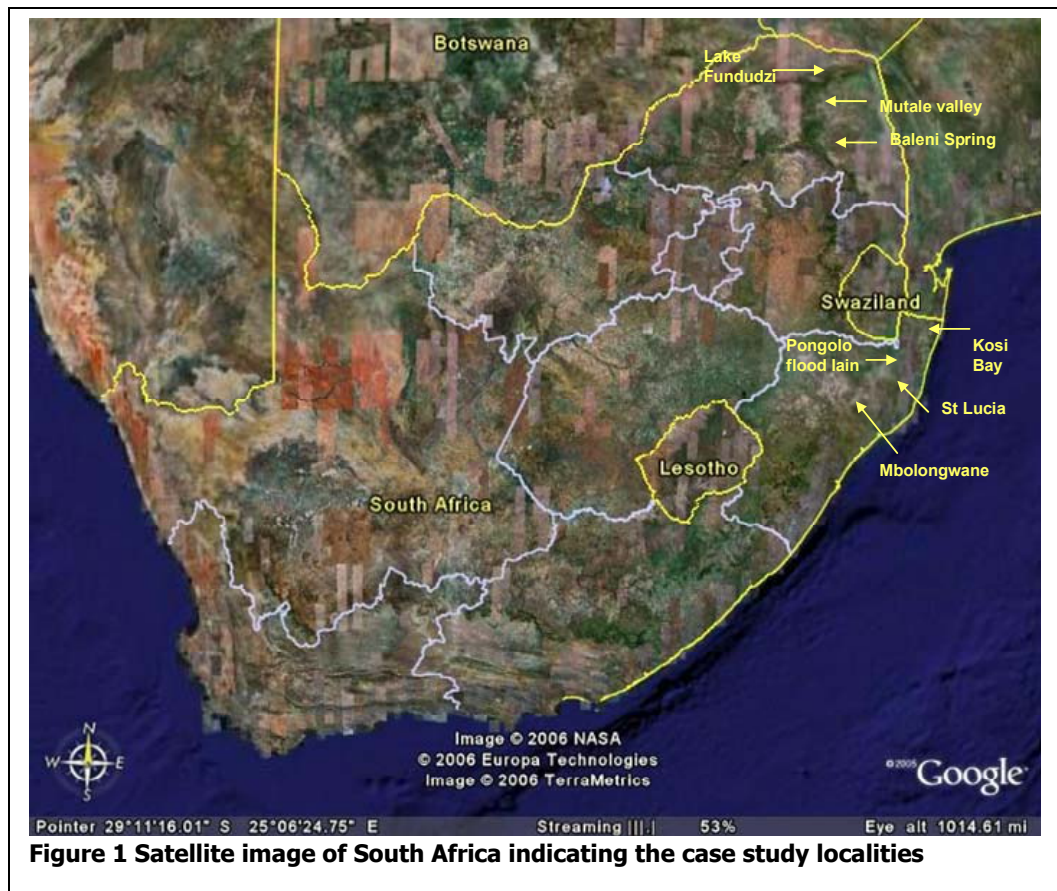
South Africa includes a diversity of freshwater resources: rivers, estuaries, wetlands and lakes, although these are limited (Fundudsi, Kosi Bay, Sibaya and St Lucia). Nonetheless, with a rainfall of 500mm, placing it well below the global average of 800mm, it is a water-stressed country. Issues of governance and rights of access are then key in managing for sustainability and equity.

Although a detailed description of the political history of South Africa is beyond the scope of this paper, it is important to understand how the 20th Century history has shaped the governance arrangements of natural resources and what we see, or appear to see, today. Democratisation in 1994 set the stage for change, and yet South Africa continues to be a deeply divided country, with the legacy of apartheid planning still pervasive. It is widely appreciated that with the institutionalisation of racial segregation in 1948, many of the inherent divides that separated people on the basis of race were then officially entrenched through statutory means. In terms of natural resources, access and management was placed squarely in the hands of the minority whites with the formalisation of native reserves (created in the early 20th C) as bantustans. Only 13% of the country was delineated as land for occupation by blacks but was expected to accommodate some 85% of the population. Much of this land was designated as tribal land, held in trust by the state for the sole occupation by blacks. This did not mean that control was transferred- this remained firmly in the hands of the Pretoria regime, whether overtly or covertly. Yet, it was almost only in these 'tribal areas' where local communities were able to exert any influence over the management and use of localised water (and other) resources¹. Thus the geographical locality of these resources must be understood within the context of the past and

¹ Bernard (2001) makes the point that these indigenous systems are also fundamentally different to recent CBNRM approaches to NRM

prevailing tenure regimes. Moreover, so omnipresent was the effects of apartheid doctrine, that it is difficult to uncover what might be regarded as a locally-evolved management regime. For example, whilst the role of chiefs and their indunas in NRM and land allocation is often acknowledged, in many cases this system was heavily transformed as individuals 'friendly' to the regime were co-opted to replace existing traditional leaders. Thus as stated by the chairperson of the Community Development Forum from a village in Mpumalanga: *"it was not the traditional system we objected to - no, that had deep and longstanding support, it was the **individuals**"*.

Thus when examining community-based natural resource governance in South Africa, for the most part, the enquiry is restricted to the 13% of former bantustan land, and even then this was heavily dictated to. In terms of water resources specifically, the control over rivers and estuaries was almost exclusively the domain of the whites, mainly supported by the riparian principle of the former Water Act. Only where rivers flowed through a bantustan was access to resources possible. This cannot be considered to be locally-based governance in any sense of the term. Somewhat surprisingly considering the strategic acquisition of land by the apartheid regime, all four of the major lake systems were located in former homelands (**check st lucia**), and these are discussed in the following case studies. Some of the larger wetlands (**such as....**) were also fell within communal land. It could be argued then that small-scale freshwater systems which offered a key resource for poverty-stricken bantustan residents and also which, by their nature did not attract much attention from the authorities, is where governance of some sort is likely to be seen.



Nonetheless, despite the global interest in CBNRM, and the call to understand local-scale governance systems, the coverage of these issues in South Africa is disappointing. In many cases this may simply reflect a lack of acknowledgement of the importance of understanding local level

governance; in other cases, the deep distrust bred over the past century makes exploring any of these issues extremely difficult and the finding, tenuous. This is the case for the Kosi Bay system for example for which, despite its beauty and importance for local livelihoods, governance aspects are not addressed in the literature [but check on Guilot paper]. The area today is beset by simmering conflict – between communities and the government authority for the area, the KZN Parks, between communities themselves and between traditional and the recently-established local government structures. Indeed a notable change is the recent entry into the institutional landscape in South Africa of the councillors, who are democratic in the sense of having been elected to represent the political party in power in the district.

See Lahiff for overview of SA communal system- maybe include as box.

2. Case studies

This section presents the case studies synthesized from the literature. Clearly, the reports on which these are based were written for different reasons and not surprisingly, the treatment of governance issues varies.

2.1 Mbongolwane wetland

Nature of the resource and the users

Mbongolwane wetland, approximately 395 ha in extent and 12 km long, lies in the headwaters of the Amatikulu catchment, west of Eshowe in KwaZulu-Natal. Principal land covers in the wetland's catchment are sugar cane, natural vegetation and crops, mainly maize (Kotze, Memela et al. 2002).

Over the past 50 years, the population has nearly doubled from an estimated 2100 in 1937 to 4000 people in 1991 (based on figures from Kotze et al. 2002). Increases are particularly evident in the area around the wetland. Nearly all households (88%) currently use the wetland for a variety of purposes, although cropping is the primary use. Additional uses include the harvesting of wetland plants for crafts, construction and medicinal purposes, water for domestic purposes and livestock watering, soil for domestic use, tourism, cultural/ religious practices and hunting and fishing.

Some 10% of the wetland is used for cultivation and this has increased steadily since the 1930s although from the mid-1990s the extent of cultivation has declined². Cultivation occurs in both community gardens where plots are held individually by members who work collectively to obtain seedlings, fencing and advice and in isolated individual plots which are not part of any organizational structure. At least 80% of the cultivators in the wetland are women.

Historical context and external environment

No information was found on the historical context of the Mbongolwane wetland per se, although as noted above, the wetland has been in use at least since the 1930s. Like all areas in South Africa, this area was likely to have been influenced by the pervasive influences of the apartheid regime particularly between 1948 and the early 1990s.

Mention is made of the DoA starting the community gardens in the 1970s as part of a food security initiative. Commercial sugar cane agriculture also exists.

² Possibly due to 6 years of above average rainfall and the impact of HIV/Aids

Property regimes and institutional arrangements

The wetland lies within communal land of the KwaNtuli Tribal Ward, with 9 of the 22 sub-wards including portions of the wetland. Their key functions included culture, dispute resolution, administration of customary law and, very importantly, allocation of land (IPS 1996, quoted in Kotze 2002). The tribal Authorities remain the primary organisations for government at the local scale although service delivery is largely the remit of Local Government Councillors and Municipalities. How this has changed over time is not documented by one must assume that the influences of apartheid structures in co-opting headmen and chiefs were evident here (ask Tessa- was this equally true for KZN as we have seen in other areas)

Allocation of land for cultivation specifically within Mbongolwane wetland varies (Kotze 1999).

- Allocation of land for community gardens takes place at the ward and sub-ward level and involves several structures. These include the Tribal Authority, garden committees and the Department of Agriculture for community gardens. Allocation of plots to individuals within each community garden is controlled by the group itself and membership is open to all households in the ward but restricted largely to women, ostensibly because of the difficulties in working with men.
- The degree of control over allocation of land for cultivation within small individual isolated patches outside of the community gardens varies according to sub-ward (IPS, 1996). Although in some sub-wards permission is obtained from the headman before cultivating, in most cases no permission is obtained. Consequently, over much of the wetland there is a very low level of control over individual parcel cultivation.
- Rules of use for reeds and grazing are noted but who controls this and how, is not stated (Check with Donovan)

The contemporary institutional landscape is complex. As noted by (Kotze, Memela et al. 2002) an extraordinary number of organisations are involved in the wetland use and management today ranging from the tribal leaders (chief together with his headmen), ward councillors, the users themselves, various government departments (Department of Agriculture, Environmental affairs, Health, KZN wildlife, a university, at least four NGOs and a craft group. Considerable conflict exists regarding the general development in the wetland. This includes conflict between political parties, between the Traditional Authority and newer municipal structures and between sub-wards over the equitable distribution of resources.

Outcomes

- Today, a great deal of conflict around wetland management and development exists. This is thought to reflect the wide range of institutions involved.

To be developed

2.2 Kosi Bay system

Kosi Bay is well-known for its extensive network of wooden fish traps, set up in a fence-like fashion across the lake (see case studies in (Working for Wetlands 2004). They are built by the AmaThonga fishermen who pass their kraals from father to son. They are placed in the shallows between the estuary and lakes mainly to catch marine fish that migrate up past the traps as juveniles and are caught as adults as they migrate back to the sea. The Kosi system is part of the



Figure 2 Kosi bay estuary and fishing traps

11,000 Kosi Bay Nature Reserve proclaimed in 1987.

Nature of the resource and the users

Kosi Bay is actually an estuarine system composed of a series of lakes joined by channels and emptying into the Indian Ocean. Salinity declines with decreasing tidal influence such that the northern lake is characterized by mangroves whilst the southern lakes are surrounded by *Phragmites* reed beds.

The area is inhabited mainly by the AmaThonga although this is changing. With the construction of a tar road and the opening-up of southern Mozambique with the end of the harrowing civil war, tourism opportunities have attracted a range of entrepreneurs and associated support skills.

A wide range of natural resources is used by the AmaThonga including fish, crabs (some 500,000 annually), shrimps, sedges and reeds, wood, medicinal plants, wild fruits, wild honey and small wildlife. The lakes are also used for cultural and religious purposes. In 1980 the Kosi Bay resource utilisation, monitoring and management programme was initiated and this continues today. This comprehensive data indicates that with the exception of introduced methods (such as gill-netting and jigging), all resource utilisation is sustainable and hence regarded as wise use (Kyle 1995).

The population of the Kosi system is unclear although Kyle notes that there are about 350 homesteads within walking distance of the northern shore. The design of the traps for which Kosi is so well-known is such that most of the fish are over 300g. About 40,000 fish are caught annually and eaten by local people. In terms of other resources, Kyle notes that the demand for *Juncus* sedge (or incema) is increasing and that as the cash value increased, entrepreneurs arrived from as far away as Johannesburg. In contrast to traditional hand-picking methods, sickles were used and exploitation increased markedly. The authorities, later with the support of the local users, advocated the ban of sickles in 1992. Aside from this restriction, today there are no limits on the areas of collection, numbers of collectors or season.

Historical context and external environment

Very little historical context prior to the establishment of Kosi Bay Nature Reserve in 1987 is given in the available literature. [However other sources need to be checked- Webster's work for example, Felgate]. Felgate (1965, cited in Kyle 1995) noted that people have lived along its shores in considerable densities for hundreds of years.

Kyle notes that the dramatic increase in people harvesting in the system in recent years is likely to continue.

Property regimes and institutional arrangements

Documentation pertaining to traditional property-regimes in the Kosi system is almost non-existent. **What about David Webster's work?**

Formally, the KBNR was managed by the KwaZulu Government's Bureau of Natural Resources, disbanded in 1994. The area now falls under the KwaZulu Wildlife Services. Since its inception, the KGBNR attempted to establish relationships with the local residents via the Tribal Authorities (Kyle 1995). This was strongly founded in the principle of stakeholder participation. Again, very little information appears to be available on the common property regimes that prevailed and continue to prevail (albeit transformed). Despite noting that some 'traditional controls and constraints' exist, details are scant (see Kyle 1995).

Kyle notes that the fish trap system is well-controlled but no further details are given as to how people gain rights of access. Working for Wetlands report (2004) states that fish traps are

handed down from father to son but how rights are transferred if there is no son for example or how new fishermen acquire rights of access appears to be poorly documented. Kyle suggests that anyone can negotiate with the owners of neighbouring traps and the community authority to build a fish trap.

Interestingly Kyle notes the increasing importance of women in resource utilisation which has risen from 57% in 1987 to 72% by 1991. Historically fish traps were the exclusive domain of men but in 1995 many trap operators were women. Kyle notes that the reasons for this are unclear but this trend raises additional questions for the aforementioned suggestion that traps are handed down to sons since this appears to have changed.

2.3 Pongolo Floodplain

[This is incomplete. Get Jangani's report- on request from WRC](#)

Nature of the resource and the users

Does Pongola fall in communal land...

A broad alluvial plain, known as the Pongolo Floodplain, extends downstream from the Pongolo Dam³ to the confluence of the Pongolo and Usutu Rivers, close to the border with Mozambique to (McCartney, Janganyi et al. 2004). Heeg and Breen (1982) estimated that at that time approximately 40,000 people are resident in the area around the floodplain and have close links to it. The Pongola floodplain supports an important fishery for the AmaThonga. The seasonal fishing is undertaken in the pans and basin on the floodplain adjacent to the river (Felgate 1982, cited in (Working for Wetlands 2004) using a variety of traditional methods (Heeg and Breen 1982). Very little of the fishing is carried out in the river itself.

Two decades ago, some 400 t were caught annually and used mainly for local consumption.

Like Kosi it appears that fish drives, once the exclusive domain of men, are nowadays almost exclusively carried out by women (Mountain 1990, cited in Kyle 1995).

A recent report details religious and spiritual beliefs?? (jangani get)

Historical context and external environment

Nothing reported on this but check Jangani

Property regimes and institutional arrangements

The Tembe-Thonga people comprise a number of clans or chieftainships. Falling under the clan chief are the district chiefs (i.e. *Izinduna*) and sub-district headmen. Until recently, the sub-district headmen controlled access to all natural resources, including land and fish, in the areas under their jurisdiction. However, according to (Breen, Dent et al. 1998) this arrangement has been undermined in recent years by growing population pressures, commercialization of floodplain activities, and uncertainty over the role of tribal authority.

Outcomes

To be developed

³ The Pongolopoort dam, which impounds the water of the Pongolo River in KwaZulu Natal was built in 1970s to provide water for irrigation. The dam is located where the river flows through a narrow gorge between the Lebombo and Ubombo mountain ranges, close to the border with Swaziland.

2.4 Baleni Spring – Ntumbukulu

Baleni Spring lies banks of the Klein Letaba or Ritave River in the Northern Lowveld of Limpopo Province). Ntumbukulu is the Tsonga concept which refers to Baleni as a supernatural place (*Petra...get details, personal communication*). The Tsonga have been exploiting the mineral spring for salt for a century and a half, and before them the BoLobedu, Lemba and Kalanga. It is a gendered site in that salt-making is the exclusive domain of women.

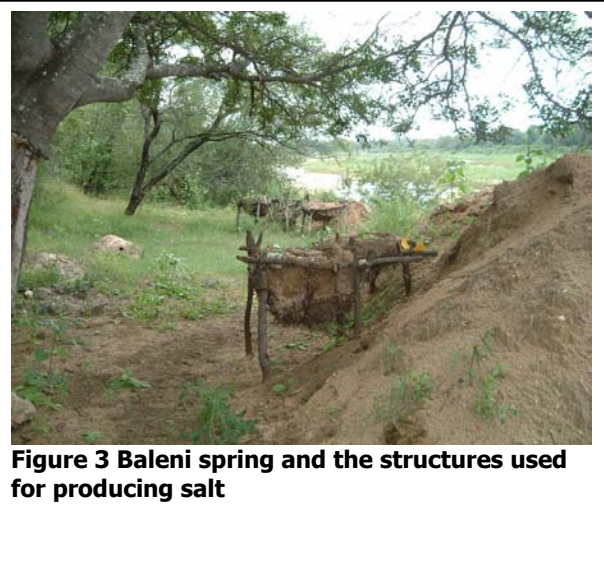


Figure 3 Baleni spring and the structures used for producing salt

Nature of the resource and users

Baleni Spring is an intermittently hot spring and wetland that lies near the Letaba River under the authority of Chief Muhaumani. The "Baleni Spring" site actually consists of two components: (a) the hot spring which lies in a wetland, and (b) the salt making activities next to the Klein Letaba River.

Salt is produced by filtering soil that has bathed in the spring overflow. Fresh river water is used to filter out the salt, then evaporated over a fire to produce salt in compacted lumps. Extraction is seasonal, occurring in winter only, since the soil is too wet for collection of salts in the rainy season.

Baleni is a sacred place that is used in pursuit of the affirmation of cultural identity, as an inspirational point for healing, creativity and religious worship. It has been used for a long time, apparently use being traced back to 300AD (promotional museum material). Only Tsonga women can produce the salt, who use it for barter and trading. It is highly sought after by traditional healers.

No reference is made to other uses, or users of the resource (the hot water, the wetland and wetland resources).

External environment

It seems that until recently, Baleni was isolated and subject to little outside influence. However, in 1998 it was identified as a site for one of the African Ivory Trail campsites. This is seen to be a source of revenue for the local community and is bound to bring change. Theoretically, protection also afforded by its being proclaimed a national heritage site (*Petra- does this provide formal structure protection? What else mean for the resource?*)

Property regime

As stated, salt production is gendered - for the exclusive use of women. Highly ritualised religious and spiritual practices surround the resource, and the extraction and production of salt. Myths and legends take shape as traditions, which limit access to and use of the resources. The place is seen to belong to feminine energies. This limits and protects who may produce and trade in the salt, and who knows the technology, to certain Tsonga women (which women exactly not clear – living close by? Of certain affiliations?). *One can assume this does place limitations on the amounts extracted?*

The spring is seen as having supernatural significance, so approached with respect. References to beliefs, rituals and the unspoilt nature of the resource indicate that there is a high level of protection of the water and wetland resource.

Gaps in information (that give one a fuller picture to make a judgement on issues of equity and sustainability, and stability of the current situation of the property regime). [Questions to Penny and Petra](#)

- Fuller description of the site, what is encompassed in the protected area? Whose local governance does it fall under?
- Who and how did women gain access to the site?
- How the women know how much salt they can make – their environmental management
- Who is part of the group of women who have the access and knowledge – how this happens. Whether there are structures within the group of women – who decides what, teaches what, and allows what, and on what basis?
- Practices beyond (of wetland, of hot water, of fish) or surrounding salt production – spiritual/ religious – what decision making surround these, and by whom.
- What structures support the protection of the resource and the users – presumably some by traditional and spiritual institutions (authorities, practitioners and practices)?
- What role government plays in protection, in monitoring. How local and government institutions interact – any conflicting interests?
- Any other pressures for change – of access, of users, of who decides, of usufructs – on the site as spiritual site, on wetland resources (what are they – do people harvest reeds? Fish? Farm etc), spring.

2.5 Mutale Valley

Nature of the Resource and users

The Mutale River rises in the Soutpansberg range, close to Lake Fundudzi, at an altitude of approximately 870m, and flows in a north-easterly direction for a distance of approximately 120km, until it joins with the Luvuvhu River just inside the Kruger National Park. The Mutale River valley lies almost entirely within the former 'homeland' of Venda (Lahiff 1997). Some 8600 people live in the area examined by Lahiff. The principle natural resource use that he reports is irrigated agriculture and livestock grazing. The most recent change has been the intensification of irrigated agriculture with water sourced from the Mutale River.

Institutional arrangements

Like most of the communal areas, the main function of the tribal leaders with regard to resource management is to decide how resources, particularly land, are divided between members of the community, so that they may obtain the means of subsistence. However (Lahiff 1997) notes that in reality these functions are largely symbolic since they have little practical power to regulate water use. He notes that overall, there would appear to be no 'traditional' practices or institutions concerned with the regulation or conservation of water resources, and no institutionalised forms

of co-operation between different tribal areas sharing the same resource. Moreover, also mirroring the situation in many former Bantustans, The democratically elected, local councils in Venda were at loggerheads with tribal leaders and struggling to establish themselves.

2.5 Other cases

2.5.1 St Lucia:

Kyle (1995) notes that daily tickets are sold for *Juncus* collection. On the first day of one season over 1000 women arrived. Very little information appears to exist. [Contact Bronwen.](#)

2.5.3 Lake Fundudzi

Waiting for book

2.5.3 Peatlands

The degradation of peatlands is of growing concern because of the biodiversity they support, their hydrological function and their limited extent. The majority of peatlands occur in Maputoland near the Mozambique border (Grundling 1998, in (Kotze 2002). Nonetheless, given the dearth of literature, it appears that their governance is poorly understood.

3. Traditional cosmologies and their role in water resources management

This section draws heavily on the body of work carried out by Penny Barnard from Rhodes University, who explores the notion that traditional leadership, had and in some cases continues to have a powerful role to play in ecological management and wide stewardship of natural resources (Bernard 2001; Bernard and Kumalo 2004). Sanctions are strongly embedded in the spirit world which brings with it a regulatory layer unappreciated in the field of water resources management. Her work is valuable in terms of this report for a number of reasons: First, it draws on cases from all over South Africa (Mvoti, NE Cape, Venda), Lesotho and Zimbabwe, underscoring that spiritual mechanisms for water resources protection are ubiquitous, even today, despite the impacts of South Africa's colonial past (see above). Secondly it raises issues important for the debate on legal pluralism at an opportune time; one when South Africa is trying to embrace, meaningfully, the principles of sustainability and equity. She makes clear that despite these commitments there are few mechanisms by which communities can appeal for and secure protection of sacred water sites. One is through the Reserve but only if the intentions to honour these needs are explicit.

Nature of the resource and their uses

Bernard examines the role of a wide range of water resources such as rivers, springs, wetlands as sacred sites. These play an important role for the training of healers, for purification and fertility ceremonies, but also in the wider community means for securing ecological sustainability. Through spiritual sanction and respect, people are able to address droughts, floods, agricultural production and so on. She asserts that these rituals ensure harmony and respect between people and the environment and affirms the role of cultural values in securing the collective good. She gives graphic examples such *as the Julianna movement that swept through southern Zimbabwe in the 1990s in response to the catastrophic drought and rodent plagues. A prophetess, Julianna attributed these to the collapse of environmental respect and social harmony, and the construction of dams and boreholes. The support she received and adherence to taboos she imposed provides ample evidence for the respect that people have for water spirits*

(move to Zimbabwe paper). In the Moviti valley in KwaZulu Natal, days of rest, to allow the river to recuperate have been re-instated following calls made by an isangoma.

External environment

A central focus of this work underscores that many sites are threatened by environmental degradation (see also (Biggs, Bohensky et al. 2004; Fox 2005?). The impacts of development projects, mining, modern agricultural practices and privatisation of land, and invasion of riparian zones by alien vegetation have all meant that many people have lost significant water sites through the exclusion and/or degradation of the resource. At Lake Fundudzi mining, chemical and industrial development and hillslope cultivation are threatening Lake Fundudzi whilst in other areas such as KZN – forestry and sugar cane has reduced stream flow in rivers.

Property regimes and institutional arrangements

Bernard explores less of the mechanisms of control but rather focuses on the role of spiritual belief systems in NRM. The thrust of (Bernard and Kumalo 2004) paper is that indigenous beliefs and practices can play an important role in water resources management. She notes that a principle function of traditional leadership is in regulating access to natural resources⁴ and thus participating in water rituals through the guidance of traditional leadership reinforces the powerful role that they play in ecological management and wide stewardship of natural resources, particularly when sanctioned through the spirit world. Moreover traditional values and practices care for collective needs, as opposed to strongly emerging western and capitalist values which focus on the accrual of individual wealth.

In this regard, indigenous healers are the repository of knowledge, and regarded as custodians of ancient traditional wisdom. Symbols such as that of the sacred pool, the python and mermaid all have great influence over resource management as they act as powerful constraints to the misuse of resources. Through traditional controls, activities that affect the resource such as damming or blocking flows prohibited, living too close to the water, are restricted, and harvesting of plants is regulated and days of rest are instituted. Such manifestations of respect and the resources and spirits associated with these, all mitigate against drought and environmental disaster. In many cases these are exclusionary: until recently the tribal authorities at Lake Fundudzi imposed an outright ban on access by “foreigners” (wanting to do research)

Ultimately Bernard notes that there are scarcely any mechanisms by which healers can appeal for protection of sacred waters and ensure access to them. Under South African statutory law, three possibilities exist:

- They can claim “cultural significance” (but this not go far enough in ensuring rights of access, particularly on private land)
- Under the National Heritage Act, wetlands can be nominated as a RAMSAR site, but as she notes this is not inclusive. For example, in Lake Fundudzi this does not protect the surrounds that impact on the lake itself.
- Through the Ecological Reserve under the NWA, sufficient water can be requested for spiritual and religious purposes. Again the problems noted with the foregoing options still hold here.

Outcomes and insights

Bernard advocates for drawing on indigenous spiritual beliefs and practices which, although under threat and change, continue to have a significant role in many people's lives, and in environmental management. From her work she also provides the following insights that are useful to bear in mind when discussing ‘traditional’ management systems:

⁴ Pick up in the discussion, link to Harmonising work which shows that this function now falls between two stools and is effectively no-one's responsibility

- Mediums and diviners draw upon a world view that is based on a fundamentally different paradigm than that of sustainable development.
- There is a fundamental difference between indigenous systems and formal CBNRM systems of today: in paradigm, orientation and principles.
- Indigenous systems are more enduring and often have a greater continuity with the past than CBNRM systems.

Finally she also contests that the (recent) assertion of spiritual practices can be seen as an idiomatic expression of protest: objecting to the forces of modernism, capitalism, monotheism and land invasion and loss of control of resources – by people who have experienced negative ecological and social consequences of development.

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Get

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